Joann J. Ordille

32 Burrell Road ▪ Lebanon, NJ 08833 ▪ 973-819-5950 ▪ joann.ordille@gmail.com

Patents, Selected Papers, Additional Information: https://www.linkedin.com/in/jordille
Syllabi, Student Projects, Additional Information: https://sites.lafayette.edu/ordillej

Education

PhD, Computer Sciences, University of Wisconsin-Madison, 1993.
> Thesis: Descriptive Name Services for Large Internets, Advisor: Barton P. Miller
> Bell Labs PhD Fellow

MS, Computer Sciences, University of Wisconsin-Madison, 1988.

MA, University of Pittsburgh, History and Philosophy of Science, 1982.

BA with Distinction, Applied Math & Philosophy, The George Washington U., DC, 1979.
> Ruggles Prize in Mathematics for the outstanding graduating mathematics major
> Gauss Prize in Philosophy for the outstanding graduating philosophy major
> Phi Beta Kappa
> Pi Mu Epsilon Mathematics Honor Society
> Omicron Delta Kappa Leadership Honor Society
> The George Washington University Four Year Board of Trustees Scholarship

Honors

VLDB Ten Year Best Paper Award 2006 for most influential paper from VLDB 1996:

> "Querying Heterogeneous Information Sources Using Source Descriptions," *Proc. 22nd International Conference on Very Large Data Bases*, 1996 (with Alon Levy and Anand Rajaraman).

> The award citation said: "Your pioneering paper from the Information Manifold project has strongly influenced subsequent work on source description, data integration, query processing in heterogeneous information systems, and web query processing."

ICDCS Best Paper Award 1993:

> "Distributed Active Catalogs and Meta-Data Caching in Descriptive Name Services," *Proc. IEEE 13th International Conference on Distributed Computing Systems*, 1993 (with Barton P. Miller).

Experience

Rutgers University Business School, Newark and New Brunswick, NJ

ASSOCIATE PROFESSOR OF PROFESSIONAL PRACTICE   2021 to present
IN MANAGEMENT SCIENCE AND INFORMATION SYSTEMS

Design and teach advanced classes in information systems. Teach a variety of
programming languages and skills including SQL, HTML, CSS, JavaScript, web
frameworks, and Git/GitHub. In my information systems course, students build, clean
and analyze data using a relational database. In my web programming course, students
complete a front-end project to build and deploy a visualization of statistics retrieved
from the US Department of Labor Statistics using a RESTful API. They also complete a
back-end project to make a database available through a RESTful interface and
demonstrate its functionality by building a front-end that uses the interface.

Lafayette College, Easton, PA

ASSISTANT PROFESSOR OF COMPUTER SCIENCE   2017 to 2021
VISITING ASSISTANT PROFESSOR OF COMPUTER SCIENCE   2016 to 2017

Researched and taught in the areas of database systems, the Internet and their
applications. Taught a variety of programming languages and skills including Java, C,
MIPS Assembler, JavaScript, web frameworks, and Linux system programming.
Designed and taught advanced classes in database systems, operating systems, data
mining, and agile software engineering. In my classes, students formed teams and
tackled real-world problems typically for a non-profit customer. Student projects have
provided web-based responsive applications to match students who can carpool, to
display information on active configurable digital bulletin boards, to notify subscribers
of time-sensitive opportunities on campus, and to integrate and visualize data of various
types including educational, environmental, sports and project data. Students designed
and implemented a Hosted FileMaker System to manage client data for an educational
services non-profit. Operating systems students built Linux shells and parts of an
operating system. Data mining students learned to build parallel algorithms for Hadoop
MapReduce on AWS.

Avaya Labs Research, Basking Ridge, NJ

Initiated research programs and provided thought leadership in essential areas for
Avaya. Initiated and managed customer relationships. Led international teams creating
systems for trial and then product introduction. Directed architecture, specification,
development, testing, defect management and documentation.

SENIOR RESEARCH SCIENTIST   2007 to 2015

- **Customer Engagement in the Home:** Started and patented research to collect and analyze customer data to provide better customer service in the home.

  Built demonstration system for banking that combined video calls and document display on a television with uploading of financial documents from a cell phone. System widely demonstrated within a major bank, and by that bank to MSNBC, The Wall Street Journal and The Financial Times. System featured on CNBC Squawk Box.

- **Emergency Services:** Identified that the e911 sector has a need for enhanced services (especially accurate GPS from cell phones and video/photography of accidents) and an infrastructure roadblock that prevents those services. Invented and patented techniques for delivering advanced services over the existing infrastructure by using data over the top of a cellular audio call, resulting in acclaim at the British Association of Public-Safety Communications Officials (BAPCO) Conference. After seeing a demonstration of Data Over the Top (DOT), the BAPCO President moved our presentation to the conference's morning keynote. DOT is available in products, and extendable to other applications.

- **Video Customer Service:** Led research in video customer service. Invented, implemented and patented techniques for transferring video calls (and associated assisted browsing sessions) from kiosks to mobile devices to enable customer service on the go. Invented and patented techniques for managing temporary SIP registrations of massive numbers of endpoints for placing video calls to a call center. Leveraged this technology to support emergency video calls from elevators.

  Led an international team creating a flash-based video customer service solution (One Touch Video) integrated through a flash-to-SIP gateway with Avaya's call center. Led trials and initial product deployments with customers in banking, computer hardware, and telecommunications.

RESEARCH SCIENTIST   2000 to 2006

- **Notification and Response Services, Subscription Services:** Led research program in large-scale automated notification and response and subscription services resulting in a paper and 10 patents .   Invented a multi-channel notification/response system (XUI) driven by a modeling language for communication. Using the language, one can model personal communications and business processes. Developed initial prototype subsystem. Led full system development.

  Created a cross-functional Avaya team to define processes for using XUI to escalate repair tickets. Reduced service escalations to the CEO and executive council to zero. Created a subscription service to extend notifications to anyone through self-service.

System grew to include subscription by partners and customers for a fee. Led transfer to product. Delivered prototype early, product on time.

Bell Labs, Lucent Technologies, Murray Hill, NJ   1996 to 2000
Bell Laboratories, AT&T, Murray Hill, NJ   1993 to 1996

Invented and promoted new technologies internally and externally. Mentored students.

MEMBER OF TECHNICAL STAFF

- **Internet Search:** Invented widely used techniques for searching the hidden web and integrating the information found there resulting in several papers and a patent. Received the VLDB Ten Year Best Paper Award in 2006 for this work. The award citation said: "Your pioneering paper from the Information Manifold project has strongly influenced subsequent work on source description, data integration, query processing in heterogeneous information systems, and web query processing."

- **Meta-Directories:** Invented meta-directories, receiving the ICDCS Best Paper Award in 1993. Designed and developed the Internet Nomenclator Meta-Directory Service which used distributed indexing, caching and parallel search techniques to answer queries quickly over hundreds of independent directory servers. AT&T licensed Nomenclator to the NSF InterNIC, and Nomenclator was listed as a driver of the next wave of computing by the San Jose Mercury News, on March 2, 1997. Invented synchronization techniques for integrating source directories into a universal directory view and then updating the sources through that view resulting in several papers and a patent. Transferred technology into a product, described as "a major step toward voice/data system inter-functionality and corporate efficiency" by the *Telecom Agenda* in 1999.

Classes Taught

At Rutgers Business School:

BAIT 470   Business Data Management, Spring 2022 (5), Fall 2021 (3).
BAIT 440   Database and Web Applications, Fall 2021.

BAIT is the undergraduate degree program in Business Analytics and Information Technology.

At Lafayette College:

CS 495   Senior Thesis, Fall 2018. (Continued as Span 496, Senior Thesis, Spring 2019.)
CS 470   Senior Project, Spring 2017, 2018, 2019, 2020, 2021.

CS 417   Data Mining, Spring 2019, Spring 2021.
CS 406   Operating Systems, Spring 2018, 2019, 2020, 2021.
CS391   Independent Study in Embedded Database Systems, Yishak Desta, Spring 2019.
CS391   Independent Study in Data Mining, Oanh Doan, Spring 2018.
CS 320   Database Management Systems, Fall 2016, 2017, 2018, 2019, 2020.
CS 203L Computer Organization Labs, Fall 2020 (2).
CS 104   Introduction to Game Programming, Fall 2017, 2018, 2019, and Spring 2020.
CS 105   Digital Media Computing Lecture, Spring 2017 (2).
CS 105L Digital Media Computing Labs, Fall 2016 (2), Spring 2017 (3).
CS 104L Introduction to Game Programming Labs, Fall 2016.
        Evaluations for these courses averaged greater than 4 on a 5 point scale.

Post-Doctoral, Before Lafayette College:

Quick Startup for Video Customer Service, Designed and delivered two-day course for
Avaya customers, 2013.

"Distributed Systems Programming," a lecture in *CS 333: Advanced Programming
Techniques*, Princeton, 1996.

Operating Systems, Rutgers University, 1996.

During Graduate School in Computer Science, University of Wisconsin:

Introduction to Programming in Pascal (2 classes).
Introduction to Programming in Fortran (2 classes).
        Evaluations for these 4 courses averaged greater than 4 on a 5 point scale.

During Graduate School in History and Philosophy of Science, University of Pittsburgh:

Assembly Language Programming, Point Park College, Pittsburgh.

Decision Theory and Scientific Reasoning (multiple classes), University of Pittsburgh.

Assembly Language Programming, Computer Systems Institute, Pittsburgh.
Fortran Programming, Computer Systems Institute, Pittsburgh.
Basic Programming, Computer Systems Institute, Pittsburgh.
Logic, Computer Systems Institute, Pittsburgh.

External Support for Instruction at Lafayette College

Lafayette Meta Mindset Project Grant, Fall 2018: support for introducing two programs into my introductory computer science class, CS 104. Campus wide project funded by Kern Entrepreneurial Engineering Network (KEEN).

- **Teaching How to Learn:** introduces students to modern cognitive learning techniques, encourages active development and tracking of a learning plan with input from more advanced computer science students as well as the instructor.
- **Fostering Resiliency**: explains, through the Lafayette Meta Mindset Model, that the process of learning in a course is directly parallel to the process of learning something for the first time in research. Discusses barriers to progress and techniques for overcoming them. Students are encouraged to reflect on what they have learned, challenges they face, and techniques for overcoming those challenges.
- The final report on this effort is available on request.

Amazon Web Services (AWS) Educate Participation, 2019-present: wrote internal proposal that resulted in Lafayette joining AWS Educate. Amazon provides free cloud computing resources campus wide. Through this program, I regularly obtain additional computing resources for resource-intensive student projects in CS 417: Data Mining.

Google Ad Grants Online Marketing Challenge, Summer 2018 and Spring 2019: with Economics Professor Ruebeck in the summer, and in CS 417 Data Mining in the spring, formed student teams of four. Each student team received $10,000 per month of online advertising funding from Google for marketing campaigns they created and optimized for a non-profit client. This project is now run by the Lafayette Dyer Center for Innovation and Entrepreneurship.

Honor Thesis Students at Lafayette

- Co-Advsior for Shira Wein '19, Textual analysis on the effects of translation on magical realism: linguistic trends across a translated corpora and the perils of cultural translation, Joint Honors Thesis in Spanish and Computer Science, 2018-2019. Honors granted in both departments.
  - Wein, S., Ordille, J., Geoffrion-Vinci, M., "Computational Sentiment Analysis as a Tool for Metacognition in Literary Analysis," *Thirteenth Graduate Portuguese and Hispanic Symposium*, Georgetown, 2021.
- Committee Member for Kelsea Chang '19, "The investigation of stroke risk factors and identification of genetic associations of strokes." Biology Honors granted.

- Committee Member for Changu Zhou '18, "Dynamics of quadratic maps." Math Honors granted.

Research Students at Lafayette

- Ezekiel Elin '20, Cold Start Problem in Art Recommendation Systems, Lafayette Excel Funded Student Research, Summer 2018 to Spring 2020, except Summer 2019. Research Team Member starting in Fall 2017.
- Nicole Kaplan '20, Recommending Art as Immediate Experiences, Lafayette Excel Funded Student Research, Summer 2017 to Spring 2018. Continuing Research Team Member Fall 2018 to Spring 2020.
- Ben Fuller '21, Art Tour Applications, Lafayette Marquis Scholar Excel Research, Fall 2017-Spring 2018. Continuing Research Team Member Fall 2018 to Spring 2020.

Student Interns

Mentored students at Bell Labs and Avaya Labs. With my guidance, the student researched and defined the project, structured the project into a series of milestones, completed the milestones, and then gave a 30-minute presentation on their project.

Peiqian Qiu, Graduate Student from Nanking University, 2008. Currently employed in China's Telecommunications Sector. Identified state transitions in streaming data.

Elisha Ziskin, Graduate Student Intern from Princeton University, 2004. Currently a Software Engineer at Google. Designed and developed interactive scripting for IM/SMS.

Priya Mahadevan, Graduate Student Intern from Duke University, 2001. Currently a Network Architect at Google. Proposed mechanisms for getting SIP through firewalls.

- Dingman, C., Mahadevan, P., and Ordille, J. J., "Supporting Communication between a Computing Device within a Network and an External Computing device," *United States Patent Application 9,497,168*, November 16, 2016.

Katrina Godwin, Graduate Student Intern, 2000. Researched topics in mobile notification systems.

Zakiyyah Langford, Undergraduate Intern from Stanford University, 1999. Currently the CEO of an IT company. Implemented a controller for a CEBus network.

Laura Tweedy, Undergraduate Intern, 1997. Explored issues of privacy and security for network accessible databases.

Patents

1. Ordille, J. J., and Skiba, D., "Delivering In-Home Customer Service Via Multiple Channels," *United States Patent 10,257,581*, April 9, 2019.

2. Ordille, J. J., Krishnakumar, A. S., and Yajnik, S., "Distribution of Ephemeral Extensions to Communication Sessions," *United States Patent 9,779,231*, October 1, 2017.

3. Dingman, C., Mahadevan, P., and Ordille, J. J., "Supporting Communication between a Computing Device within a Network and an External Computing device," *United States Patent Application 9,497,168*, November 16, 2016.

4. Fletcher, M., Krishnan, P., Ordille, J. J., and Singh, N., "Splitting a Call for an Emergent Event into Multiple Devices Using Data Channels," *United States Patent 9,485,357*, November 1, 2016.

5. Krishnan, P., Ordille, J. J., and Singh, N., "Merging Multiple Emergency Calls and Information therefrom at Emergency Systems," *United States Patent 9,420,099*, August 16, 2016.

6. Ordille, J. J., Krishnakumar, A. S., and Yajnik, S., "Call Center Customer Service Kiosk," *United States Patent 9,256,726*, February 9, 2016.

7. Ordille, J. J., Tandon, N. M., Tendick, P., and Yang, Q., "Publish-Subscribe System with Templates for Role-Based View of Subscriptions (Part 2)," *United States Patent 9,124,643*, September 1, 2015.

8. Ordille, J. J., Matula, V., and Kashi, R., "External Contact Center Data Collection and Measurement," *United States 8,903,076*, December 2, 2014.

9. Ordille, J. J., and Petsche, T. A., "Automatic Notification and Response (Part 2)," *United States Patent 8,868,659*, October 21, 2014.

10. Ordille, J. J., Tandon N. M., and Yang, Q., "Notifying Users of Predefined Changes to Dynamic Attributes," *United States Patent 8,566,311*, October 22, 2013.

11. Ordille, J. J., Slye, J. H., Tendick, P., and Yang, Q., "Automatic Notification and Response Based on Communication Flow Expressions Having Dynamic Context," *United States Patent 8,516,045*, August 20, 2013.

12. Ordille, J. J., and Petsche, T. A., "Automatic Notification and Response (Part 1)," *United States Patent 8,510,392*, August 13, 2013.

13. Ordille, J. J., Tandon, N. M., Tendick, P., and Yang, Q., *"*Publish-Subscribe System with Templates for Role-Based View of Subscriptions (Part 1)*," United States Patent 8,495,163*, July 23, 2013.

14. Ordille, J. J., and Tendick, P., *"*Event Notifications Based on the Identity of the Calling Party*," United States Patent 8,102,974*, January 24, 2012.

15. Ordille, J. J., Slye, J. H., Tendick, P., and Weiss, D. M., *"*Dynamically Adjusting Membership of a Communication Flow Expression*," United States Patent 8,001,182,* August 16, 2011.

16. Ordille, J. J., Tendick, P., Slye, J. H., and Yang, Q., "Publish-Subscribe System with Third Party Subscription Delivery," *United States Patent 8,001,182*, August 16, 2011.

17. Ordille, J. J., "Integrating Diverse Databases and Maintaining Their Consistency," *United States Patent 8,001,182*, February 9, 2010.

18. Ordille, J. J., Petsche, T. A., and Wadler, P. L., "Notification and Response Based on Communication Flow Expressions," *United States Patent 7,436,947*, October 14, 2008.

19. Burritt, D. R., Evans, E., Klein, R. M., Ordille, J. J., Sethi, R., and Urroz, H., "Dropped Call Continuation," *United States Patent 7,228,145*, June 5, 2007.

20. Arlein, R. M., Lieuwen, D. F., Michael, G. C., Ordille, J. J., and Silva, J. F., "Active Database Trigger Processing Using a Trigger Gateway," *United States Patent 6,594,656*, July 15, 2003.

21. Levy, A. Y., Ordille, J. J., and Rajaraman, A., "Information Manifold for Query Processing," *United States Patent 5,995,961* , November 30, 1999.

22. Levy, A. Y., and Ordille, J. J., "Integration of an Information Server Database Schema by Generating a Translation Map from Exemplary Files," *United States Patent 5,778,373*, July 7, 1998.

Publications

Journal and Conference Publications

1. Ordille, J. J., Tendick, P., and Yang, Q., "Publish-Subscribe Services for Urgent and Emergency Response," *Proc. Fourth ICST / IEEE International Conference on Communication System Software and Middleware*, 2009.

2. Offut, J., Wang, Q., and Ordille, J. J., "An Industrial Case Study of Bypass Testing on Web Applications," *Proc. First IEEE International Conference on Software Testing, Verification, and Validation,* 2008.

3. Freire, J., Lieuwen, D. F., and Ordille, J. J., "Integrating network devices in a meta-directory: The MetaComm experience," *Information Systems Journal,* **27**(3): 193-217 (2002).

4. Freire, J., Lieuwen, D. F., Ordille, J. J., Garg, L., Holder, M., Urroz, H., Michael, G. Orbach, J., Tucker, L., Ye, Q., and Arlein, R., "MetaComm: a meta-directory for tele-communications," *Proc. 16th IEEE International Conference on Data Engineering*, 2000.

5. McLellan, R., Berenbaum, A., Dingman, C., Ordille, J. J., and Ryan, G., "Residential Gateways in Full Service Access Networks," *Proc. IEEE European Conference on Networks and Optical* Communications, 1998. Published in *Long-Haul, ATM and Multi-Media Networks*, 1998.

6. McLellan, R., Berenbaum, A., Ordille, J. J., and Ryan, G., "Access Network Evolution and Residential Gateways," *Proc. International Society for Optics and Photonics (SPIE) Conference*,1998.

7. Levy, A., Rajaraman, A., and Ordille, J. J., "Querying Heterogeneous Information Sources Using Source Descriptions," *Proc. 22nd International Conference on Very Large Data Bases*, 1996. Winner of the VLDB Ten Year Best Paper Award, 2006.

8. Levy, A., Rajaraman, A., and Ordille, J. J., "Query Answering Algorithms for Information Agents," *Proc. AAAI 13th National Conference on Artificial Intelligence*, 1996.

9. Ordille, J. J., "When agents roam, who can you trust?" *Proc. IEEE First Conference on Emerging Technologies and Applications in Communications*, 1996.

10. Ordille, J. J., and Miller, B. P., "Distributed Active Catalogs and Meta-Data Caching in Descriptive Name Services," *Proc. IEEE 13th International Conference on Distributed Computing Systems*, 1993. Winner of the Best Paper Award.

11. Ordille, J. J., and Miller, B. P., "Database Challenges in Global Information Systems*," Proc. ACM SIGMOD International Conference on the Management of Data*, 1993.

12. Ordille, J. J., and Miller, B. P., "Nomenclator Descriptive Query Optimization in Large X.500 Environments," *Proc. ACM SIGCOMM Conference on Communications Architectures and Protocols*, 1991.

Workshop Publications

13. Wein, S., Ordille, J., Geoffrion-Vinci, M., "Computational Sentiment Analysis as a Tool for Metacognition in Literary Analysis," *Thirteenth Graduate Portuguese and Hispanic Symposium*, Georgetown, 2021.

14. Ordille, J. J., and Petsche, T., "Communication Flow Expressions in a Notification and Response System," *Proc. Third International Workshop on Technologies for E-Services*, held in association with the *28th International Conference on Very Large Data Bases*, 2002. Published in *Lecture Notes in Computer Science*, **2444**, 86-96 (2002).

15. Arlein, R., Freire, J., Gehani, N., Lieuwen, D., and Ordille, J. J., "Making LDAP Active with the LTAP Gateway: Case Study in Providing Telecom Integration and Enhanced Services," *Proc. International Workshop on Databases in Telecommunications*, held in association with the *25th International Conference on Very Large Data Bases*, and the *4th IFCIS International Conference on Cooperative Information Systems*, 1999. Published in *Lecture Notes in Computer Science*, **1819**, 54-73 (1999).

16. Ryan, G., Berenbaum, A., Dingman, C., McClellan, R., and Ordille, J. J., "Residential Gateways and Enabling Network Services Using the Inferno Operating System," *Proc. Nineth IEEE Workshop on Local and Metropolitan Area Networks*, 1998.

17. Levy, A., Rajaraman, A., and Ordille, J. J., "The World Wide Web as a Collection of Views: Query Processing in the Information Manifold," *Proc. Workshop on Materialized Views: Techniques and Applications*, held in association with the *ACM SIGMOD International Conference on the Management of Data*, 1996. An extended version appears in *Proc. 22nd International Conference on Very Large Data Bases*, 1996.

18. Levy, A., and Ordille, J. J., "An Experiment in Integrating Internet Information Sources," *AAAI Fall Symposium on AI Applications in Knowledge Navigation and Retrieval*, 1995. A condensed version appears in the *Proc. AT&T Middleware Day and Software Symposium*, 1995.

19. Ordille, J. J., "Information Gathering and Distribution in Nomenclator," *AAAI Spring Symposium on Information Gathering from Heterogeneous, Distributed Environments*, 1995.

20. Ordille, J. J., and Miller, B. P., "Lost in a Labyrinth of Workstations," *Proc. IEEE Third Workshop on Workstation Operating Systems*, 1992 (with Barton P. Miller).

Other Refereed Publications

21. Petsche, T., and Ordille, J. J., "Avaya XUI Notification and Response," *Proc. Avaya Software Symposium*, 2001.

22. Ordille, J. J., and Petsche, T., "Communication Flow Expressions," *Proc. Avaya Software Symposium*, 2001.

Invited Papers

23. Halevy, A., Rajaraman, R., and Ordille, J. J., "Data Integration: The Teenage Years," *Proc. 32nd International Conference on Very Large Data Bases*, 2006.

Internet Engineering Task Force Publications

24. Ordille, J. J., "Internet Nomenclator Project," RFC 2258, 1998.

25. Elliott, J., and Ordille, J. J., "Simple Nomenclator Query Protocol," RFC 2259, 1998.

ATM Forum Publications
Many of the contributions below were written in my role as Technical Chair of the *ATM Forum Directory and Name Services Working Group*, to expedite the creation of the *ATM Name Service V2.0 Specification*.

26. Ordille, J. J., "ATM Name Service V2.0," ATM Forum Specification AF-DANS-0152.000, July 2000.

27. Ordille, J. J., "ATM Name Service V2.0 Final Ballot," ATM Forum Contribution FB-DAN-0152, June 2000.

28. Ordille, J. J., "ATM Name Service V2.0 Straw Ballot," ATM Forum Contribution STR-DAN-ANS-02.00, March 2000.

29. Ordille, J. J., "Consolidation of Contributions 0081-0087 into ATM Name Service V2.0," ATM Forum Contribution 00-0113, February 2000.

30. Ordille, J. J., "ATM Name Service Examples and Explanatory Text," ATM Forum Contribution 00-0087, February 2000.

31. Ordille, J. J., "Levels of Support for ATM Name Service and Interoperability with DNS," ATM Forum Contribution 00-0086, February 2000.

32. Ordille, J. J., "API to ATM Name Service," ATM Forum Contribution 00-0085, February 2000.

33. Ordille, J. J., "ATM Name Service Security," ATM Forum Contribution 00-0084, February 2000.

34. Ordille, J. J., "ATM Name Service V2.0 Editorial Revisions," ATM Forum Contribution 00-0083, February 2000.

35. Ordille, J. J., Epley, B., Shaver, T., and Wan, A., "E.164 Encoding in ATM Name Service V2.0 for ATM Address to Domain Name Mapping," ATM Forum Contribution 00-0082, February 2000.

36. Ordille, J. J., Epley, B., Shaver, T., and Wan, A., "Revision of ATM Name Service V2.0 Bi-Level Addressing Support," ATM Forum Contribution 00-0081, February 2000 (with T. Epley, T. Shaver, and A. Wan).

37. Ordille, J. J., "ATM Name Service V2.0 Protocol Transport," ATM Forum Contribution 99-0647, November 1999.

38. Ordille, J. J., "Summary of Discussion of ATM Name Service and Bi-Level Addressing at the Rome Meeting," ATM Forum Contribution 99-0404, July 1999.

39. Ordille, J. J., "ATM Name Service Support for ATM Bi-Level Addresses," ATM Forum Contribution 99-0281, April 1999.

40. Ordille, J. J., "ATM Name Service V 2.0," ATM Forum Baseline Technical Document BTD-SAA-ANS-02.00, February 1999.

41. Ordille, J. J., "Name Services for ADSL Clients," ATM Forum Contribution 98-0960, November 1998. Presented to a joint meeting of the ATM and ADSL Forums.

42. Ordille, J. J., Ryan, G., Berenbaum, A., Dingman, C., and McLellan, R., "Enabling Residential Network Services Using Subscriber Profiles," ATM Forum Contribution 98-0788, October 1998.

43. Ryan, G., Berenbaum, A., Dingman, C., McLellan, R., and Ordille, J. J., "Establishing the Trust Boundary Between Core and Residential Networks," ATM Forum Contribution 98-0757, October 1998.

44. Ordille, J. J., Berenbaum, A., Dingman, C., McLellan, R., and Ryan, G., "Enhancing Name and Directory Services in Core ATM Networks," ATM Forum Contribution 98-0741, October 1998.

45. Ordille, J. J., Berenbaum, A., Dingman, C., McLellan, R., and Ryan, G., "Network Services in a Residential/Small Office Environment," ATM Forum Contribution 98-0733, October 1998.

Other Publications

46. Ordille, J. J., "Data for the Public Good," *State of the Lehigh Valley Report*, November 2017.

47. Ordille, J. J., "Mentoring Across the Pipeline: CRA-W Programs at the Grace Hopper Celebration of Women in Computing," *Computing Research News*, **23**(1), January 2011.

48. Ordille, J. J., "CRA-W Showcases Its Programs at the Grace Hopper Celebration of Women in Computing," *Computing Research News,* **22**(1), January 2010.

49. Ordille, J. J., "Internships Enhance Student Research and Educational Experiences," *Computing Research News,* **20**(5), November 2008.

50. Fisher, K., Landau, S., Lau, T., and Ordille, J. J., "Supporting Women in Research Labs," *Computing Research Association Committee on Women in Computing Research (CRA-W) Newsletter*, Winter - Spring 2008.

51. Ordille, J. J., "Nomenclator," *NameFLOW-Paradise Annual Report 1995-1996*, ed. by Vincent Berkhout et. al., 1996.

52. Cannon, T. C., and Ordille, J. J., "Untangling the Internal Web: How do I know what I don't know?" *Bell Labs News*, December 1996.

Conference Panels, Demonstrations and Presentations

Demonstration, "Exception Conferencing and Emergency Notification and Response," *First International World Bank Seminar on eLeadership*, 2005 (with David Boyer from Avaya and Sandor Boyson from The University of Maryland).

Demonstration, "Nomenclator Directory and Information Services," *Bell Labs Technology Transfer Symposium*, 1996.

Panel Co-Chair, "Intelligent Agents in Distributed Systems," *Fifteenth IEEE International Conference on Distributed Computing Systems*, 1995.

Panelist, "The Effect of Networking Technology on the Library of Tomorrow," *Conference of the Pennsylvania Association of Computer and Information Science Educators (PACISE)*, 1994.

Panelist, "Emerging Network Technologies: Which are Crucial?" *Conference of the Pennsylvania Association of Computer and Information Science Educators (PACISE)*, 1994.

Panelist, "Practical and Industrial Problems in Configurable Distributed Systems," *Second International Workshop on Configurable Distributed Systems*, 1994.

Invited Talks

"Seamless Back-End Analytics: Solutions at Hand," *Analytics: Gearing for Primetime Conference*, 2013.

"Integrating Heterogeneous Data Sources and Communication Services," University of Limerick, Ireland, 2007.

Keynote, "Communication Flow Expressions in a Notification and Response System," *Third International Workshop on Technologies for E-Services*, held in association with the *28th International Conference on Very Large Data Bases*, 2002.

Keynote, "Saying 'Hello' will Never Be the Same – The New Power and Choice in Communications," *Fourth Annual Colorado Women in Information Technology Conference*, 2002.

"Communication Flow Expressions," *Avaya Software Symposium*, 2001.

"MetaComm: a meta-directory for telecommunications," *16th IEEE International Conference on Data Engineering*, 2000.

"Is Internet Shopping Different than Buying a Designer Watch on the Streets of New York?" *Meeting of the American Society of Women Accountants, South Jersey Chapter*, 1999.

"Directory Enabled Applications," *Science and Technology Exchange: A Forum for Sharing and Learning*, Bell Labs Research Alumni of the Bell Labs Cooperative Research Fellowship Programs for Minorities (CRFP) and the Bell Labs Graduate Research Program for Women (GRPW), 1999.

"Querying Heterogeneous Information Sources Using Source Descriptions"
- *22nd International Conference on Very Large Data Bases*, 1996.

- University of Frankfurt, 1996.

"Challenges for Global Information Systems," Indian Institute of Technology, Mumbai, 1996.

 "When agents roam, who can you trust?" *IEEE First Conference on Emerging Technologies and Applications in Communications*, 1996.

"The World-Wide Web: Strengths, Weaknesses and Future Possibilities," *AT&T Network Implementation Systems Division Technical Forum*, 1996.

"Information Gathering and Distribution in Nomenclator," *AAAI Spring Symposium on Information Gathering from Heterogeneous, Distributed Environments*, 1995.

"Tools for Internet-Wide Information Access: Challenges, Techniques, Examples," *Conference of the Pennsylvania Association of Computer and Information Science Educators (PACISE)*, 1994.

"Nomenclator: Descriptive Name Services for Large, Heterogeneous Networks,"
- *Conference of the Pennsylvania Association of Computer and Information Science Educators (PACISE)*, 1994.
- *Integrated Directory Services Working Group*, Internet Engineering Task Force (IETF) Meeting, 1994.

 "Techniques for Simple, Fast Resource Location on the Internet," *Bell Labs Area 11 Women's Research Lunch*, July 1994.

"Distributed Active Catalogs and Meta-Data Caching in Descriptive Name Services"
- *IEEE 13th International Conference on Distributed Computing Systems*, 1993.
- *Computing Research Association Workshop on Academic Careers for Women*, May 1993.

"Database Challenges in Global Information Systems*," ACM SIGMOD International Conference on the Management of Data*, 1993.

"Lost in a Labyrinth of Workstations," *Proc. IEEE Third Workshop on Workstation Operating Systems*, 1992 (with Barton P. Miller).

"Nomenclator Descriptive Query Optimization in Large X.500 Environments," *ACM SIGCOMM Conference on Communications Architectures and Protocols*, 1991.

Bell Labs Seminar Talks

Gave invited talks below in the International Bell Labs Seminar on the future of technology. The seminar hosted talks by Bell Labs scientists who were chosen in consultation with the host country. Speakers, including Nobel Laureate Horst Störmer, spent two to three days in each city giving talks to customer conferences, universities and government organizations; meeting with customers; and interviewing with the press. My talks were:

"eCommunication Model: The Third Wave of eBusiness"
- Rio de Janeiro, Brazil, August 2000
- Sao Paulo, Brazil, August 2000

"What's next for the Internet?"
- Gaesthaus Petersburg, Germany, January 2000
- European Union, Brussels, Belgium, January 2000
- Multimedia University, Melaka, Malaysia, September 1999
- Kuala Lumpur, September 1999
- University of the Philippines, Manila, September 1999
- Manila, September 1999
- Istanbul, May 1999
- Milan, April 1999
- Rome, April 1999

"Internet of the Future"
- Prague, May 1998
- Vienna, May 1998
- Hong Kong, March 1998
- Singapore, March 1998

Bell Labs Seminar Interviews

Press coverage from interviews I gave during the Bell Labs Semniars.

Silvio Ribas,"The Integration of Telecommunications Systems Into the Internet," an interview with J. Ordille, *Gazeta Mercantil*, Brazil, August 28, 2000, p. c3.

E. H. Lopez,"Bell Labs bares directory synchronization technology," an interview with J. Ordille, *Manila Bulletin*, September 26, 1999.

J. G. Alarilla,"Bell Labs weaving techno dream world," an interview with J. Ordille and R. Espinodola, *Philippine Daily Inquirer*, September 20, 1999.

Conference Session Chair

Session Chair, New Investigators 2, *Grace Hopper Conference*, 2004.

Session Chair, Transaction Processing, *Fifteenth International Conference on Distributed Computing Systems*, 1995.

Session Chair, Naming and Information Systems Session, *Fourteenth International Conference on Distributed Computing Systems*, 1994.

Professional Activities and Service

Since joining Lafayette, my service contributions fall into seven broad categories: (1) ensuring a strong computer science department, (2) promoting diversity and inclusion, (3) inspiring students to service and academic excellence, (4) publicizing the college, (5) building relationships with alumni and the community, (6) using my expertise to improve life at Lafayette and in the larger world, and (7) assisting students facing difficulties. These contributions are organized by category and described in the Lafayette Section below.

Prior to joining Lafayette, my service contributions to the Computer Science Community fall into four broad categories: (1) promoting diversity and inclusion, (2) mentoring students and new computing professionals, (3) reviewing research funding proposals and completed research, and (4) leading a standards committee working group. These contributions are described in the Before Lafayette Section below.

Service During the Lafayette Years

Below you will find a section for each category of my service during my years at Lafayette College. Each section is organized, to the degree possible, in reverse chronological order with the most recent service first.

- **Ensuring a strong computer science department:**

  o Organizer, Computer Science Field Exam for Seniors, Spring 2019.

    The field exam helps establish the excellence of our programs to the Accreditation Board for Engineering and Technology (ABET).

o   Liaison, Academic Resource Hub (previously ATTIC), Spring 2018-Spring 2019.

Organized tutoring assistance for introductory students by senior students. Worked with the Hub to extend their Mentored Study Group (MSG) Program to use an in-class TA as the MSG leader for CS 104/105. By attending class, the TA could both assist in class and tutor students outside of class in a way that reinforced class lessons. This MSG approach is now standard in CS 104 and 105. Also organized the cs.getHelp() Drop-In Clinic tutors for CS 150.

o   Computer Science Search Committees: reviewed applications, interviewed candidates online via video conferencing and in-person.
    ▪   Computer Science tenure-track faculty, Fall 2018, successful.
    ▪   Computer Science opportunistic tenure-track faculty, Fall 2018, successful.
    ▪   Computer Science tenure-track faculty, Spring 2018, unsuccessful.
    ▪   Computer Science visiting faculty, Spring 2018, successful.
    ▪   Computer Science lab coordinator, Spring 2018, successful.

- **Promoting diversity and inclusion:**

o   Advisor, Women in Computing (WinC) Student Organization, Fall 2016 – Spring 2020.

WinC creates a community of those who identify as women and are interested in Computer Science. It helps with their recruitment, retention and success in the field. I advise WinC on programming, and on extending their outreach to more students, our alumni and the community outside Lafayette. I mentor WinC's student leadership. There are many WinC programs on which I've worked. Selected programs and accomplishments are below.

    ▪   Recruit students to attend the Grace Hopper Celebration of Women in Computing Conference each year, Spring 2017 – present. Help the students obtain funding through conference scholarships and free registrations, the Computer Science Department and the Provost's Office. Beyond WinC, I also recruit students to attend the ACM Richard Tapia Celebration of Diversity in Computer Science, and help them find funding.
    ▪   In Spring 2019, WinC received the Aaron O. Hoff Big 8 Program of the Year Award for Hidden Figures Week and Women in STEM Week. The

award recognized WinC's accomplishment in providing programs that explored sociocultural issues with dialogue from differing viewpoints.

- In Spring 2019, WinC President, Shira Wein, received the Aaron O. Hoff 1974 Award for her leadership of WinC in working for the equality of women at Lafayette in the spirit of our first women graduates.
- Advised students on creating a Women in STEM Week for Spring 2019 as a collaborative effort with Women in the Sciences, The Society of Women Engineers and the Math Club. Like the previous term's Hidden Figures Week, these programs attracted many participants.
    o Interviewed about the week in Talia Charles, "Women in STEM week celebrates diversity of experiences," *Lafayette News*, April 5, 2019, retrieved on January 25, 2020 from https://www.lafayettestudentnews.com/blog/2019/04/05/draft-women-in-stem-week/ .
- Suggested and advised students on creating a Hidden Figures Week for Fall 2019 in celebration of the visit to campus by Margot Lee Shetterly, author of *Hidden Figures*. All Hidden Figures Week programs were well received with high attendance by students, faculty, community members and alumni.
    o Lafayette press coverage for one event is available in "True Grit: Women in STEM," *Lafayette News*, November 2018, retrieved on January 21, 2019 from https://news.lafayette.edu/2018/12/06/true-grit-women-in-stem/.
- Suggested and organized individual resume reviews and a workshop on interviewing at conferences with Alana Albus from Career Services and students who previously attended the Grace Hopper Celebration of Women in Computing (GHC) and the ACM Richard Tapia Celebration of Diversity in Computer Science.
- Encouraged WinC to become an official student organization, which they did in Fall 2017.

o Facilitator, Computer Science Programming for Elementary and Middle School Students, Spring 2018-present.
    - Advisor, Girls/Kids Who Code Club, Fall 2019 – present. Re-organized club to place day-to-day organization and leadership into student hands under a student coordinator. The club sponsors 2 five-week sessions of programming per semester at Paxinosa Elementary School.

Lafayette students teach the elementary school students to create animations and games in the block programming language Scratch. One session per semester focuses on recruiting girls to a Girls Who Code Session. The other session is open to both girls and boys as a Kids Who Code Session.

- Received Landis Active Citizens Award, October 2019, for my work with the Paxinosa programs.
  - Interviewed about the significance of this work in "Landis Active Citizens," *Lafayette News*, October 12, 2019, retrieved on 1/25/2020 from https://news.lafayette.edu/2019/10/12/landis-active-citizens-2/ .
- Consulting Faculty Member, Girls Who Code Club at Paxinosa Elementary School, Fall 2018 – Spring 2019. During this term, Professor Tom Collins ran the club, and I consulted with the club about experiences in the prior year's program at the library. Lafayette students taught Paxinosa students in a format similar to the 2019-2020 format.
  - Lafayette press coverage for the program is available in Stephen Wilson, "Kids Who Code," *Lafayette News*, June 20, 2019, retrieved on January 25, 2020 from https://news.lafayette.edu/2019/06/20/kids-who-code/.
- Advisor, Middle School Coding Classes taught by Lafayette WinC Members at the Easton Public Library, Spring 2018. This program for middle school boys and girls was taught by members of WinC. It also used the Scratch programming language.

o Leader, Orientation Community Reading Discussions, August 2016 – August 2019.

The community reading discussions focus on the experiences of diverse communities, so they are included in this section. I read the book and lead a group of first year students in discussing the book as part of orientation.

- *The Book of Delights* by Ross Gay, August 2019.
- *Hidden Figures* by Margot Lee Shetterly, August 2018.
- *Hope and Other Dangerous Pursuits* by Laila Lalami, August 2017.
- *Between the World and Me* by Ta-Nehisi Coates, August 2016.

- o Participant, Posse Plus Retreat, 2017-2019.

    The Posse Foundation forms cohorts of scholars from diverse backgrounds who have outstanding leadership qualities. Lafayette College has two cohorts of Posse Scholars each year, one from New York City and one from the District of Columbia. I participate by invitation in the Scholars' Posse Plus Retreat (a weekend for Posse Scholars and their friends and mentors). During the retreat, my roles typically include participating in group discussions and exercises, one-on-one discussions with students, and gathering information and using it on return to improve the experience of underrepresented groups on campus. I know the students at the retreats appreciate my support, and I learn a great deal from them about how to improve my teaching and service.

    - "State of Leadership: Community, Conflict & Change," March 5-6, 2021.
    - "State of Our Union," February 8-10, 2019.
    - "Hope, Hate, and Race," February 9-11, 2018.
    - "Us vs. Them?," February 24-26, 2017.

- o Contributor, "The Woman Who Inspired Me: Faculty and staff complete this thought in honor of Women's History Month," *Lafayette News*, March 19, 2019, retrieved on January 25, 2020 from https://news.lafayette.edu/2019/03/19/the-woman-who-inspired-me/.
- o Participant, Women in Science and Engineering (WISE) Forum, Lehigh University, February 13, 2018. Encouraged high school girls to pursue STEM and facilitated interaction between these students and women undergraduate students from Lafayette.
- o Presenter and Author, "Memoirs of a Girl Geek: The Early Years," Architects of Change Spoken Word Event for Women's Heritage Month, sponsored by Gender and Sexuality Programs, March 2017. Quoted in Morgan Sturm, "Women faculty and staff perform spoken word," *The Lafayette*, March 31, 2017, retrieved on January 25, 2020 from https://www.lafayettestudentnews.com/blog/2017/03/31/women-faculty-and-staff-perform-spoken-word/.
- o International Friendship Program Family for two students from China, 2016-2018.

- **Inspiring students to service and academic excellence**:

  o Honored as a professor who made a lasting impact and changed the lives of students by the Lafayette TAG (Together from Application to Graduation) Scholars, a group of students selected for their social impact leadership, Spring 2021.
  o Member, Teaching and Learning Committee, Fall 2019 – present.
  o Member, Phi Beta Kappa Committee, Spring 2019 – present.
  o Advisor, Upsilon Pi Epsilon (UPE) Computing and Information Disciplines Honor Society, Fall 2018 – present. Organize yearly election of new members. Work with the student leadership to induct new members and promote scholarship opportunities.
    - UPE President Shira Wein won a UPE Academic Achievement Award, 2019.

  o Mentor and Supporter, First Generation Students, Spring 2018-present.

    - First Generation Student Mentor, Spring 2018-present.
    - Contributing Video Presenter, Lafayette series to support First-Generation Students. See video called "First on First: Seeking Advice," Lafayette First-Generation Student Support Web Page, 2019, retrieved on January 25, 2020 from https://advising.lafayette.edu/home-3/college-transition-support/first-generation-student-support/.
    - Founding Chapter Member, Tri-Alpha First Generation Honor Society, Spring 2018-present.

  o Interviewed by English 100 student about the academic writing process, February 6, 2018.
  o Panelist, Academics 101, International Student Orientation, August 2017.

- **Building relationships with alumni and the community:**

  o Facilitator, Computer Science Programs with Paxinosa Elementary School, Fall 2018-present.   See entry above under Promoting diversity and inclusion.
  o Presenter, Community Learning and Research in Database Systems, Grand Opening Celebration of the Rockwell Center for the Integrated Sciences, September 27, 2019.
  o Advisor, WinC panel of eight alumni women in tech, Spring 2019. Through my work with the Council of Lafayette Women, I made the initial alumni

introductions to the WinC Student Leadership. Together they organized this panel for Women in STEM Week.

- o Recruiter, Community Participation in Hidden Figures Week and Women in STEM Week, Fall 2018, Spring 2019. Recruited alumni and members of the Women in Science and Engineering (WISE) Forum at the Da Vinci Science Center, many of whom attended.
- o Leader, Discussion of Hidden Figures, Council of Lafayette Women (Alumni), Homecoming, October 13, 2018.
- o Creator and Maintainer, LinkedIn Lafayette CS Alumni Group, May 2018 - present.
- o Author, Celebratory letter to graduating senior. Video of letter presentation available online in "Dear Grad," *Lafayette News*, May 18, 2018, retrieved on January 21, 2019 from https://news.lafayette.edu/2018/05/18/dear-grad/.
- o Attendee, Council of Lafayette Women (Alumni) Art Event, Doylestown, 2017.
- o Attendee, Princeton Alumni Wine 3/9, Princeton, March 2017.

- **Publicizing the college:**

  - o Public Scholar, Fall 2019 – Spring 2020, accepted by application to this Lafayette program to work with RW Jones Public Relations Agency to communicate research and expertise to the public.
  - o Featured Faculty Member, Admissions Wall, Markel Hall, prepared in 2019, installed January 24, 2020.
  - o Contributing Video Presenter on the interdisciplinary honors thesis work of Kathryn Haglich '19 in "Detecting Cancer Earlier," Lafayette College YouTube Channel, September 30, 2019, retrieved on January 25, 2020 from https://www.youtube.com/watch?v=5kyhdoZEE8Q.
  - o Contributing Video Presenter, Rockwell Integrated Sciences Center Grand Opening Celebration Video, September 27, 2019. My contribution is excerpted in "Rockwell Integrated Sciences Center," Lafayette College YouTube Channel, September 30, 2019, retrieved on January 25, 2020 from https://www.youtube.com/watch?v=Mr9nD9ehKZA.
  - o Video Presenter, "Move into Rockwell," Lafayette College YouTube Channel, Aug 2, 2019, retrieved on January 25, 2020 from https://www.youtube.com/watch?v=TzgevY7ne6Q.
  - o Speaker, Steel Beam-Signing Ceremony for the Rockwell Center. Talk lent a phrase to the title in press coverage by Brian Penderson, " 'It is our future' – ceremony celebrates building of Lafayette's $75M Rockwell Center," Lehigh

Valley Business, May 11, 2018, retrieved on January 21, 2019 from
http://www.lvb.com/article/20180511/LVB01/180519971/it-is-our-future--
ceremony-celebrates-building-of-lafayettes-75m-rockwell-center.

o Research Group featured in "Brilliant," Cur Non: Lafayette College Admissions
Journal, 2,1 (March 3, 2018), republished as "What makes us stand out," Cur Non,
June 11, 2018, retrieved on January 21, 2019 from
https://www.lafayette.edu/cur-non/brilliant-vol2-issue1/. The original
publication was sent to all accepted students in 2018.

o Interviewed in Bryan Hay, "A Computer Could Write This Headline. But not this
article. Yet," *Lafayette Magazine*, Spring 2018, retrieved on January 21, 2019
from https://magazine.lafayette.edu/spring2018/2018/03/16/a-computer-
could-write-this-headline/.

o College Spokesperson, welcomed Carolyn Choate and Sydny Turnbull on their
300-mile kayaking trip to raise awareness and support for breast cancer
research and the contributions of women in STEM, at the request of Lafayette
Communications Division, August 2017.

- **Using expertise to improve life at Lafayette and in the larger world:**

  o Panelist, "Connect with Confidence in Higher Ed," two webinars sponsored by
  Zoom and the Own the Room Foundation, November 2020. The webinars
  illustrate techniques for engaging students online as well as in person. Session 1
  recording and Session 2 recording retrieved on 1/7/2021.

  o Reviewer of educational outreach strategy for a major technology company,
  2020.

  o Reviewer of textbook, Princeton University Press, 2020.

  o Public Scholar, Fall 2019 – Spring 2020. See discussion above in Publicizing the
  college.

  o Community-Based Learning Projects Faculty, Fall 2016-present.

    My CS 320: Database Systems Course and my CS 470: Senior Project Course do
    projects for the community. Community projects included:

    - Data analysis of online readership patterns for Lafayette
      Communications, Spring 2021.
    - Web-based database system and applications for Family Connection of
      Easton, PA, Spring 2021.
    - Data cleaning and visualization for Lafayette Soccer, Fall 2019 - Spring
      2020.

- Data management system for the Landis Center for Community Engagement, Fall 2019 - Spring 2020
- Data integration and visualization for Forest Trends, an environmental non-profit, Fall 2018 - Spring 2019.
- Digital signage system for the Lafayette Computer Science Department, Spring 2019.
- Art Labelling Game for Art Galleries and Collections Curator Michiko Okaya, deployed in my Artful Research Project, Spring 2018-present.
- Data integration and visualizations for the Lehigh Valley Research Consortium and the United Way of the Greater Lehigh Valley, Fall-2016 - Spring 2018. Inspired the design approach in a project by the Lehigh Valley Economic Development Corporation.
  - CS 470 Senior Project Class featured in "Life as a Leopard: Driven by Data," Lafayette News, April 24, 2018, retrieved on January 21, 2019 from https://news.lafayette.edu/2018/04/24/driven-by-data/

- Interviewed in Policy Studies 400 PBS 39 special, "Exploring Artificial Intelligence," Lafayette Lens, 2019 (16), PBS 39, retrieved on January 25, 2020 from https://video.wlvt.org/video/lafayette-lens-exploring-artificial-intelligence-g93y2j/.
- Consultant, University College Roosevelt, The Netherlands. Spoke with Data Mining Class Visitor, Dr. Alexei Karas, about starting a data science program. March 25, 2019.
- Participant and presenter, Lehigh Valley Research Consortium, Spring 2017-Fall 2018.

    Participate in Lehigh Valley Research Consortium activities on topics of data collection, integration and use.

  - Participant, Eighth Annual State of the Lehigh Valley Event, Lehigh Valley Research Consortium, DeSales University, November 12, 2018.
  - Presenter, "Data for the Public Good," Seventh Annual State of the Lehigh Valley Event, Lehigh Valley Research Consortium, DeSales University, November 2017.
  - Panelist, "Data Sharing Logistics Breakout Session," Seventh Annual State of the Lehigh Valley Event, Lehigh Valley Research Consortium, DeSales University, November 2017.

- Author, "Data for the Public Good," *State of the Lehigh Valley Report*, November, 2017.

o Presenter, Catme and Other Tools for Student Project Team Formation, Management and Evaluation, Economics Department Brown Bag, July 31, 2018.
o Consultant, Augustana College, November 8, 2018. Spoke with visiting faculty about techniques for retaining underrepresented groups in engineering disciplines.
o Presenter, Nearpod Online Tool for Interactive Classroom Activities, CITLS Teaching and Technology Grant Lunch Presentations, March 28, 2018.

- **Assisting students facing difficulties:**

o Sexual Misconduct & Resources Training (SM&RT) Team Advisor (previously Sexual Misconduct Support Advisor, previously SASH Advisor), Spring 2018 to present. Provide information one-on-one to students who are dealing with the aftermath of sexual misconduct.
o Interviewed about SM&RT in Danielle Kraidin, "SMART team opens new avenue for reporting sexual misconduct on campus," The Lafayette, September 6, 2019, retrieved on January 25, 2020 from https://www.lafayettestudentnews.com/blog/2019/09/06/final-interview-with-a-smart-advisor-new-headline/.

Service Before Joining Lafayette

Below you will find a section for each category of my service to my profession and broader society during my years prior to joining Lafayette College.

- **Promoting diversity and inclusion:**

o Board Member, Computing Research Association Committee on the Status of Women in Computing Research (CRA-W), 1997-2010.
  - CRA-W received the National Science Board's Public Service Award, 2005.
  - CRA-W received the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, 2003.

  The Computing Research Association (CRA) promotes research in computer science across academia, industry and government. Its focus is on enabling

programs and structures, and future directions of research. The Committee on the Status of Women is Computing Research (CRA-W) is a subgroup of CRA that works to expand the participation of women in computing research. Recently the committee expanded its focus to all underrepresented groups and is now called the Committee on Widening Participation in Computing Research (CRA-WP). Described below are my CRA-W leadership responsibilities. The next section, Mentoring students and new professionals, describes my roles in programs serving the constituencies of CRA-W and the Grace Hopper Conference.

- Chair, *CRA-W Programs for Grace Hopper*, 2011, 2010, 2009.
- Chair, *First and Second Grace Hopper Mentoring Workshops for Undergraduates, Graduate Students, and Early Career Researchers* held in conjunction with the *Grace Hopper Conference*, 2010, 2009.
- Chair, *CRA-W Researcher of the Month Series*, 2008-2009.
- Presenter, "Distinguished Lecture Series Program," *NSF Site Visit for the CRA-W/CDC Broadening Participation Grant*, 2008.
- Chair, *CRA-W Research Lab Focused Programs*, 2008.
- Co-Chair, *CRA-W Distinguished Lecture Series*, 2004 - 2008.
- Vice-Chair, Women in Industrial and National Laboratories, *NSF/CRA Supermentoring Workshop* held at the *Federated Computer Research Conference (FCRC)*, 1999.

o   Grace Hopper Celebration of Women in Computing Conference Activities outside of CRA-W efforts above.

Described below are my Grace Hopper Conference leadership responsibilities. The next section, "Mentoring students and new professionals," describes my roles in programs serving the constituencies of CRA-W and the Grace Hopper Conference.

- Industrial Advisory Committee, *Grace Hopper Conference*, 2010, 2009.
- Poster Judge, *Grace Hopper Conference*, 2008.
- Co-Chair, New Investigator Papers, *Grace Hopper Conference*, 2006.

o   Bell Labs Activities.
- Summer Placement Committee, *Bell Labs Cooperative Research Fellowship Program for Minorities (CRFP)*, 2000.

- Member, *Bell Labs Research Affirmative Action Committee*, 1998.
- Chairperson, *Bell Labs Computing Research Center (Area 1127) Affirmative Action Program Planning Committee*, 1994.

- **Mentoring students and new computing professionals:**

  o Panels or Talks at Conferences/Workshops.

  These activities aim at assisting the community in building skills and an understanding of computing. The Computing Research Association (CRA) workshops, often through the Committee on the Status of Women in Computing Research (CRA-W), and the Grace Hopper Conference provide ideal venues for mentoring students and new computing professionals.

  - Panel Author, "Going Global," Grace Hopper Conference, 2010.
  - Panelist, "The Social Networking Revolution," *Grace Hopper Conference,* 2010*.*
  - Panel Author and Chair, "The Economy and the Future of Computing," *Grace Hopper Conference*, 2009.
  - Birds of a Feather Author and Presenter, "Breaking Free: Creating and Innovating Like No One Else," *Grace Hopper Conference*, 2009.
  - Session Author and Presenter, "Changing the World through Technological Innovation," *Grace Hopper Conference*, 2008.
  - Presenter, "Finding a Summer Internship"
    - *CRA-W Grad Cohort*, 2008, 2007 (with student, Julie Weber)
    - *CRA-W Grad Cohort*, 2006 (with student, Wei Le)
  - Panelist, "Career Paths Contrasted*," NSF/CRA-W Supermentoring Workshop for Women in Computer Science Research* at the *Federated Computing Conference (FCRC)*, 2008.
  - Panelist, "Strategies for Success in Industry and National Labs" *NSF/CRA-W Supermentoring Workshop for Women in Computer Science Research* at the *Federated Computing Conference (FCRC)*, 2007, Panelist and Moderator: 1999.
  - Panelist, "Finding 'Common Ground': An Uncommon Approach to Correcting the Under-Representation of Women in Computing," *Grace Hopper Conference*, 2006.

- Presenter, "Computer Geeks are not all Nerds!" *Girls' Career Institute of the New Jersey State Federation of Women's Clubs*, Douglass College, 2005.
- Panelist, "Models of Industrial and National Lab Research," *CRA-W Career Mentoring Workshop*, 2005.
- Presenter and Panelist, "The Job Search Process and Later Job-Related Decision Making: The Industry Perspective," *CRA-W Career Mentoring Workshop*, 2005.
- Panelist, "Pursuing Graduate School and a Research Career," *Grace Hopper Conference*, 1997.
- Panelist, "Answering Questions about Graduate School," *Women of AT&T Program for Women Student Employees*, July 1994.

o Panels at Universities.

These activities aim at recruiting undergraduates, especially women undergraduates, into programs of advanced study in Computer Science.

- Panelist, "Pursuing Graduate School and a Research Career," *CRA-W Sponsored Panel in Conjunction with its Distinguished Lecture Series*
  - Columbia University, 2004
  - University of British Columbia, 2001
  - Texas A&M University, 2000
- Panelist, "Career Choices after the Bachelor's Degree in Computer Science: Perspectives of Women in Industry and Academia," *CRA-W Sponsored Panel in Conjunction with its Distinguished Lecture Series*, Colorado State University, 2001.
- Presenter, "Increasing the Number of Women in Computing," *University of Wisconsin Colloquium*, November 1993 (with Janet Wiener).

- **Reviewing research funding proposals and completed research:**

o Program Committees.

- Program Committee Member, *ACM SIGMOD International Conference on the Management of Data,* 2011.
- Program Committee Member, *International Conference on Database and Expert Systems Applications (DEXA)*, 2010, 2009.
- Program Committee Member, *International Conference on Very Large Data Bases (VLDB),* 2009, 2008, 2007, 2006, 2004.

- Member, *NSF Review Panel*, 2007, 2000.
- Program Committee Member, *First International Conference on Configurable Distributed Systems*, 1996.
- Program Committee Member, *Lucent Technologies Software Symposium*, 1996.
- Area Program Chair, Distributed Services and Management, *Fifteenth International Conference on Distributed Computing Systems*, 1995.
- Program Committee Member, *Fourteenth IEEE International Conference on Distributed Computing Systems*, Poznan, Poland, 1994.
- Program Committee Member, *Second International Workshop on Configurable Distributed Systems*, Pittsburgh, 1994.

o Reviewer.

- *ACM Transactions on Information Systems*, 1996
- *ACM SIGCOMM Conference on Communications Architectures and Protocols*, 1995, 1990, 1989.
- *Information Systems Journal*, 1995.
- *Distributed Systems Engineering Journal*, 1994.
- *Sixth IEEE International Conference on Parallel and Distributed Systems*, 1994.
- *IEEE Journal on Selected Areas in Communications: The Global Internet*, 1994.
- *Summer Usenix*, 1994.
- *Journal of Parallel and Distributed Computing*, 1993.
- *ACM Transactions on Computer Systems*, 1992.
- *IEEE Computer*, 1992.
- *Computer Networks and ISDN Systems Journal*, 1990, 1989.
- *IEEE Journal on Select Areas in Communications*, 1990.

- **Leading a standards committee working group:**

o Technical Chair, *ATM Forum Directory and Name Services Working Group*, 1998-2000.