Jeannie R. Albrecht

| CONTACT INFORMATION | Department of Computer Science
47 Lab Campus Dr
Williams College
Williamstown, MA 01267 | *Voice:* (413) 597-4251
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EDUCATION

University of California, San Diego — La Jolla, California
Ph.D., Computer Science, June 2007
Advisors: Amin Vahdat and Alex C. Snoeren
Dissertation: "Distributed Application Management"

Duke University — Durham, North Carolina
M.S., Computer Science, December 2003
Project: "Developing and Evaluating Novel Network Protocols on Wide-Area Testbeds"

Gettysburg College — Gettysburg, Pennsylvania
B.S., Computer Science and Mathematics, May 2001
Valedictorian, Summa Cum Laude

RESEARCH INTERESTS

My research interests include the design and performance of distributed systems, particularly focusing on reliability, scalability, and extensibility achieved in mobile and wide-area networks. I am also interested in ways to minimize energy consumption in buildings using distributed sensors and optimization systems for load management. Finally, I am currently exploring topics related to computer science education in elementary schools.

ACADEMIC APPOINTMENTS

Professor — *Williams College* — Williamstown, Massachusetts
July 2017 - present

Chair of Computer Science — *Williams College* — Williamstown, Massachusetts
June 2023 - present,
July 2017 - June 2020

Associate Professor — *Williams College* — Williamstown, Massachusetts
July 2013 - June 2017

Assistant Professor — *Williams College* — Williamstown, Massachusetts
July 2007 - June 2013

Adjunct Professor — *University of Massachusetts Amherst* — Amherst, Massachusetts
December 2009 - present

Research and Teaching Assistant — *University of California, San Diego* — La Jolla, California
January 2004 - June 2007

Research Assistant — *Duke University* — Durham, North Carolina
August 2001 - December 2003

Research and Teaching Assistant — *Gettysburg College* — Gettysburg, Pennsylvania
August 1998 - May 2001

INDUSTRIAL APPOINTMENTS

Research Intern — *Hewlett Packard Research Lab* — Palo Alto, California
June 2004 - September 2004

| **Research Intern** | *IBM T.J. Watson Research Center* | Hawthorne, New York |

Research Intern   *IBM T.J. Watson Research Center*   Hawthorne, New York
May 2003 - August 2003

Programming Intern   *CNAV Systems, Inc.*   Gettysburg, Pennsylvania
May 2000 - July 2001

Software Tester   *Microsoft Corporation*   Redmond, Washington
May 1998 - August 1998

COURSES
TAUGHT

Williams College   Williamstown, Massachusetts
    CSCI 432: Operating Systems
    CSCI 339: Distributed Systems
    CSCI 237: Computer Organization
    CSCI 136: Data Structures and Advanced Programming
    CSCI 134: Introduction to Computer Science
    CSCI 102: The Socio-Techno Web (Tutorial)
    CSCI 010: Untangling the Web: A Social Analysis of the Internet

University of California, San Diego   La Jolla, California
    CSE 123A: Undergraduate Computer Networks

RESEARCH
STUDENTS

Ruby Teklemariam '24 (Fall 2023 – Spring 2024) – Honors thesis co-advisor

David Goetze '24 (Fall 2023 – Spring 2024) – Honors thesis co-advisor

Gregor Remec '24 (Summer 2023)

Maycie Blair '25 (Summer 2023)

Carolyn Jones '25 (Summer 2022, Summer 2023)

Sophie Goldstein '23 (Fall 2022 – Spring 2023) – Honors thesis co-advisor

Alisa Kanganis '25 (Summer 2022)

Emily Salinas Romero '25 (Summer 2022)

Gerardo Morales '24 (Summer 2022)

Jamie Lovette '22 (Fall 2021 – Spring 2022) – Honors thesis advisor

Markus Feng '21 (Fall 2020 – Spring 2021) – Honors thesis co-advisor

Kirby Gordon '20 (Summer 2019)

Jae Mahn Surh '20 (Summer 2019)

Taylor Beebe '20 (Spring 2019) – now at Microsoft

Michael Wong '20 (Spring 2019) – now at Apple

Miranda Chaiken '19 (Fall 2018 – Spring 2019) – Honors thesis advisor – now at Palantir

Grace Mazzarella '19 (Fall 2018) – now at AARIS

Grace Murray '20 (Summer 2018)

Abby Miller '19 (Summer 2018) – now at Medium

Casey Pelz '19 (Summer 2018) – now at Grubhub

Chetan Patel '18 (Spring 2018) – now at Parthenon

Eli Meckler '18 (Fall 2017 – Spring 2018) – now at Niantic

Ryan Patton '18 (Fall 2017) – now at Flatiron Health

Jack Ferguson '18 (Summer 2017 – Spring 2018) – now at CKM Advisors

Lylia Li '18 (Summer 2017) – now at InterSystems

Ryan Kwon '17 (Spring 2017 – Fall 2017) – now at Dropbox

Anjali Pai '19 (Summer 2016) – now at UC San Diego

Katherine Blake '19 (Summer 2016)

Dawn Wu '18 (Summer 2016) – now teaching English in Hong Kong

Matt McNaughton '16 (Fall 2015 – Spring 2016) – Honors thesis advisor – now at Flatiron Health

Devin Gardella '16 (Summer 2015 – Spring 2016) – now at Amazon

Gordon (Mac) Finnie '16 (Summer 2014, Summer 2015, Fall 2015)

Sarah Abramson '15 (Summer 2013, Summer 2014) – Honors thesis advisor – now at Google

Abbie Zimmermann-Niefield '15 (Fall 2014 – Spring 2015) – now at CU Boulder

Benjamin Jones '15 (Fall 2014) – now at Amazon

Simon Chase '14 (Spring 2014) – now at Akamai

Tommy Gaidus '13 – Honors thesis advisor – now at Strava

Jennifer Gossels '13 – Honors thesis advisor – now at Princeton University

Karlan Eberhardt '13 (Summer 2012 & Fall 2012) – now at Kryuus

Pamela Mishkin '16 (Spring 2012) – now at Cambridge University

Yuxing (Danny) Huang '11 – Honors thesis advisor* – PhD from UC San Diego, now at NYU

April Shen '13 (Summer 2010) – now at Babylon Health

Kaylee Weyerhaeuser '11 (Summer 2010) – cofounded Valt, Inc., now at Dropbox

Moaj Musthag '10 (Spring 2010) – MS from UMass Amherst, now at Turo

Emily Yu '11 (Spring 2010) – now at Epic Systems

Ville Satopää '11 (Spring 2008 – Spring 2010) – PhD from Penn, now at INSEAD Business School

Antal Spector–Zabusky '12 (Summer 2009 – Spring 2010) – 2010 Goldwater scholar*, now at Penn

Kelsey Levine '10 (Summer 2009, Summer 2012 – Spring 2014) – founded Riseline, now at Williams College

Sean Barker '09 – Honors thesis advisor – PhD from UMass Amherst, now at Bowdoin College

John (Macklin) Chaffee '09 (Summer 2008 & Fall 2008) – cofounded FinalForms

Joel Hilliard '09 (Summer 2008)

Austin Stanley '10 (Summer 2008) – now at YouTube

Nikolay Topilski '08 (UC San Diego, M.S., Fall 2007 – Spring 2008) – now at Akamai

Darren Dao '08 (UC San Diego, M.S., Fall 2007 – Spring 2008) – now at Intuit

(*CRA Outstanding Undergraduate Research Award Honorable Mention)

PROFESSIONAL SERVICE	IEEE Pervasive Computing magazine Editorial Board member, 2020 – present

IEEE Pervasive Computing magazine Editorial Board member, 2020 – present

Co-editor of "Smart Homes" column in IEEE Pervasive Computing magazine, 2018 – present

EduPar program committee member, 2020, 2022

Reviewer of Pervasive and Mobile Computing Journal, 2017

PerHealth Workshop program committee member, 2017

CNERT program committee member, 2016

Student Opportunity Lab Mentor on "Undergraduate Research" at Grace Hopper, 2016, 2017

PerCom program committee member, 2015, 2016, 2017, 2018

TridentCom program committee member, 2012 & 2015

Co-organizer of NSF/GENI Regional Workshop at NEIU, 2015

OSR-Repeat program committee member, 2015

Grace Hopper Conference Internet of Things/Wearable Technology program committee member, 2015

GENI Research and Educational Experiment Workshop program committee member (GREE), 2012 – 2015

Faculty co-chair of the Internet of Things/Wearable Technology track for Grace Hopper Conference, 2014

Organizer of NSF/GENI Workshop on Introduction to GENI, 2014

Organizer of NSF/GENI Workshop on Prototyping and Deploying Experimental SDXs, 2014

Organizer of NSF/GENI Workshop on GENI in Education (at GEC 18), 2013

Chair of NSF Workshop on Designing Tools and Curricula for Undergraduate Courses in Distributed Systems, 2012

Swarthmore College Honors Examiner, 2012, 2018, 2020

Chair for GENI Working Group on Experiment Workflow and Services, 2009 – 2011

Reviewer for ACM Transactions on Autonomous and Adaptive Systems Journal (TAAS), 2011

Networking panel chair at NSF Archive Workshop, 2010

Birds of a Feather committee member at Grace Hopper, 2010

Reviewer for National Science Foundation, 2009, 2013, 2015

Reviewer for Software: Practice and Experience Journal (SP&E), 2009

Reviewer for IEEE Transactions on Parallel and Distributed Systems Journal (TPDS), 2009

Member of Women In Computing Group (Duke, UCSD, Williams)

Member of ACM, IEEE, and USENIX Computing Associations

INSTITUTIONAL SERVICE	Faculty Steering Committee Elected Member, 2012 – 2013, 2023 – present
	Faculty Interview Panel Committee, 2021 – 2022
	Curriculum and Staffing Decisions Ad Hoc Committee, 2020 – 2021
	Data Science Strategic Planning Working Group, 2019 – 2020
	Committee on Appointments and Promotions, 2018 – 2020
	Goldwater Scholarship Committee, 2016
	Curricular Planning Committee, 2015 – 2018
	Faculty Advisor to Alpine Ski Team, 2015 – present
	Faculty Mentor Program, 2015 – 2018
	Class of 1966 Environmental Center Advisory Committee Member, 2013 – 2018
	Technology and Education Committee Member, 2012 – 2014
	Children's Center Parental Advisory Committee, 2011 – 2018
	Women's Ultimate Frisbee Team Coach (finished 2nd at 2011 & 2013 National Championship), 2009 – 2016
	Science Executive Committee At Large Member, 2009 – 2010
	Faculty Review Panel Elected Member, 2009 – 2010, 2015 – 2017
	Committee on Honor and Discipline, 2009 – 2010
	Mellon Mays research advisor, 2009
	Committee on Academic Standing, 2008 – 2009, Fall 2015
	First-Generation Student Advising Pilot Program, 2008 – 2010

DEPARTMENTAL SERVICE	Department Chair, 2017 – 2020, 2023 – present
	Facilities Manager Supervisor, 2021– present
	Web/Documents Support Person, 2008 – 2010, 2012 – 2014, 2021 – 2023
	UniCS (Underrepresented Identities in Computer Science) faculty co-advisor, 2017 – 2018, 2021 – 2022

Colloquia chair, 2014, 2016 – 2017

Divisional Research Funding Committee Representative, 2009 – 2010

Facilities Manager Support Person, 2007 – 2010, 2012 – 2013, 2017 – 2018

Computer Science Student Advisory Committee (CoSSAC), 2007 – 2008, 2015 – 2016

Social Event Coordinator, 2007 – 2008, 2015 – 2016

Women in CS, 2007 – present

HONORS AND AWARDS

Nelson Bushnell '20 Prize (awarded to one Williams College faculty member in each division whose "practice in writing and in teaching conforms notably to standards of good usage"), 2013

Best Paper Runner Up at WWW Conference (top 2 out of 831 submissions), 2013

Best Paper Session at PerCom Conference (top 3 out of 150 submissions), 2012

Gettysburg College Young Alumni Achievement Award for career development, 2011

ACM Student Research Competition Semi-finalist (Grace Hopper), 2006

National Science Foundation Graduate Research Fellow, 2001 – 2003

Gettysburg College Senior Scholarship Prize in Computer Science, 2001

Gettysburg College Top Student Award in Mathematics, 1998 – 2001

Gettysburg College Linnaean Award for overall achievement during college career, 2000

Phi Beta Kappa Academic Honor Society, 2000

Alpha Lambda Delta Academic Honor Society, 1998

Gettysburg College Presidential Scholar, 1997 – 2001

JOURNAL ARTICLES

1. Dong Chen, Sandeep Kalra, David Irwin, Prashant Shenoy, and Jeannie Albrecht. Preventing Occupancy Detection from Smart Meters. *IEEE Transactions on Smart Grids (ToSG), Special Section on Cyber-Physical Systems and Security for Smart Grids*, 6(5), pages 2426–2434, September 2015.

2. Jeannie Albrecht, Christopher Tuttle, Ryan Braud, Darren Dao, Nikolay Topilski, Alex C. Snoeren, and Amin Vahdat. Distributed Application Configuration, Management, and Visualization with Plush. *ACM Transactions on Internet Technology (TOIT)*, 11(2), pages 6:1–6:41, December 2011. Acceptance rate = 27%.

3. Jeannie Albrecht, David Oppenheimer, David Patterson, and Amin Vahdat. Design and Implementation Tradeoffs for Wide-Area Resource Discovery. *ACM Transactions on Internet Technology (TOIT)*, 8(4), pages 18:1–18:44, September 2008.

4. Dejan Kostić, Alex C. Snoeren, Amin Vahdat, Ryan Braud, Charles Killian, James W. Anderson, Jeannie Albrecht, Adolfo Rodriquez, and Erik Vandekieft. High Bandwidth Data Dissemination for Large-scale Distributed Systems. *ACM Transactions on Computer Systems (TOCS)*, 26(1), pages 3:1–3:61, February 2008.

5. Jeannie Albrecht, Christopher Tuttle, Alex C. Snoeren, and Amin Vahdat. PlanetLab Application Management Using Plush. *ACM Operating Systems Review (SIGOPS-OSR)*, 40(1), pages 33–40, January 2006.

CONFERENCE PUBLICATIONS

6. Pradeep Ambati, David Irwin, Prashant Shenoy, Lixin Gao, Ahmed Ali-Eldin, and Jeannie Albrecht. Understanding Synchronization Costs for Distributed ML on Transient Cloud Resources. *IEEE International Conference on Cloud Engineering (IC2E)*, June 2019.

7. Dong Chen, David Irwin, Prashant Shenoy, and Jeannie Albrecht. Combined Heat and Privacy: Preventing Occupancy Detection from Smart Meters. In *Proceedings of the Twelfth IEEE Conference On Pervasive Computing and Communications (PerCom)*, Concise paper. March 2014. Acceptance rate = 25/175 = 14%.

8. Ryan Hurley, Swagatika Prusty, Hamed Soroush, Robert J. Walls, Jeannie Albrecht, Emmanuel Cecchet, Brian Neil Levine, Marc Liberatore, Brian Lynn, and Janis Wolak. Measurement and Analysis of Child Pornography Traf-

ficking on P2P Networks. In *Proceedings of the International World Wide Web Conference (WWW)*, 11 pages, May 2013. Acceptance rate = 125/831 = 15%. Best Paper Runner Up.

9. Sean Barker, Aditya Mishra, David Irwin, Emmanuel Cecchet, Prashant Shenoy, and Jeannie Albrecht. Smart*: An Open Data Set and Tools for Enabling Research in Sustainable Homes. In *Proceedings of the ACM SIGKDD Workshop on Data Mining Applications in Sustainability (SustKDD)*, 6 pages, August 2012.

10. Barath Raghavan, David Irwin, Jeannie Albrecht, Justin Ma, and Adam Streed. An Intermittent Energy Internet Architecture. In *Proceedings of the Third ACM/IEEE International Conference on Future Energy Systems (e-Energy)*, 4 pages, May 2012. Short paper. Acceptance rate = 7/22 = 32%.

11. Sean Barker, Aditya Mishra, David Irwin, Prashant Shenoy, and Jeannie Albrecht. SmartCap: Flattening Peak Electricity Demand in Smart Homes. In *Proceedings of the Tenth IEEE Conference On Pervasive Computing and Communications (PerCom)*, pages 67–75, March 2012. Acceptance rate = 16/150 = 11%. Best Paper Session.

12. David Irwin, Anthony Wu, Sean Barker, Aditya Mishra, Prashant Shenoy, and Jeannie Albrecht. Exploiting Home Automation Protocols for Load Monitoring in Smart Buildings. In *Proceedings of the Third ACM Workshop On Embedded Sensing Systems For Energy-Efficiency In Buildings (BuildSys)*, pages 7–12, November 2011. Acceptance rate = 10/29 = 35%.

13. Ville Satopää, Jeannie Albrecht, David Irwin, and Barath Raghavan. Finding a "Kneedle" in a Haystack: Detecting Knee Points in System Behavior. In *Proceedings of the Third IEEE Workshop on Simplifying Complex Networks for Practitioners (Simplex)*, pages 166–171, June 2011.

14. Jeannie Albrecht and Danny Yuxing Huang. Managing Distributed Applications using Gush. In *Proceedings of the Sixth International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities, Testbed Practices Session (TridentCom)*, pages 401–411, May 2010.

15. Darren Dao, Jeannie Albrecht, Charles Killian, and Amin Vahdat. Live Debugging of Distributed Systems. In *Proceedings of the International Conference on Compiler Construction (CC)*, pages 94–108, March 2009. Acceptance rate = 18/72 = 25%.

16. Jeannie Albrecht. Bringing Big Systems to Small Schools: Distributed Systems for Undergraduates. In *Proceedings of the Fortieth ACM Technical Symposium on Computer Science Education (SIGCSE)*, pages 101–105, March 2009. Acceptance rate = 100/302 = 33%.

17. Nikolay Topilski, Jeannie Albrecht, and Amin Vahdat. Improving Scalability and Fault Tolerance in an Application Management Infrastructure. In *Proceedings of the First USENIX Workshop on Large-Scale Computing (LASCO)*, 12 pages, June 2008.

18. Jeannie Albrecht, Ryan Braud, Darren Dao, Nikolay Topilski, Christopher Tuttle, Alex C. Snoeren, and Amin Vahdat. Remote Control: Distributed Application Configuration, Management, and Visualization with Plush. In *Proceedings of the Twenty-first USENIX Large Installation System Administration Conference (LISA)*, pages 183–201, November 2007. Acceptance rate = 22/55 = 40%.

19. Laura Grit, David Irwin, Varun Marupadi, Piyush Shivam, Aydan Yumerefendi, Jeff Chase, and Jeannie Albrecht. Harnessing Virtual Machine Resource Control for Job Management. In *Proceedings of the First Workshop on System-level Virtualization for High Performance Computing (HPCVirt)*, 8 pages, March 2007.

20. Jeannie Albrecht, Christopher Tuttle, Alex C. Snoeren, and Amin Vahdat. Loose Synchronization for Large-Scale Networked Systems. In *Proceedings of the USENIX Annual Technical Conference (USENIX)*, pages 301–314, June 2006. Acceptance rate = 21/153 = 14%.

21. David Oppenheimer, Jeannie Albrecht, David Patterson, and Amin Vahdat. Design and Implementation Tradeoffs for Wide-Area Resource Discovery. In *Proceedings of the Fourteenth IEEE Symposium on High Performance Distributed Computing (HPDC)*, pages 113–124, July 2005. Acceptance rate = 24/133 = 18%.

22. David Oppenheimer, Jeannie Albrecht, David Patterson, and Amin Vahdat. Distributed Resource Discovery on PlanetLab with SWORD. In *Proceedings of the First ACM/USENIX Workshop on Real, Large Distributed Systems (WORLDS)*, 5 pages, December 2004.

23. Dejan Kostić, Adolfo Rodriguez, Jeannie Albrecht, and Amin Vahdat. Bullet: High Bandwidth Data Dissemination Using an Overlay Mesh. In *Proceedings of the Nineteenth ACM Symposium on Operating System Principles (SOSP)*, pages 282–297, October 2003. Acceptance rate = 22/128 = 17%.

24. David Athey and Jeannie Albrecht. Applying Caching Techniques for Dynamic Personalized Content in Software Engineering Projects. In *Proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA)*, pages 1477–1483, June 2003.

25. David Athey, Jeannie Albrecht, and Rodney Tosten. Caching Techniques for Dynamic Personalized Content in an Enterprise Knowledge Portal. In *Proceedings of the International Conference on Internet Computing (IC)*, pages 31–38, June 2003.

26. Dejan Kostić, Adolfo Rodriguez, Jeannie Albrecht, Abhijeet Bhirud, and Amin Vahdat. Using Random Subsets to Build Scalable Network Services. In *Proceedings of the Fourth USENIX Symposium on Internet Technologies and Systems (USITS)*, 14 pages, March 2003. Acceptanrce rate = 21/76 = 28%.

27. Jeannie Albrecht and Rodney Tosten. Exploring Voice Over IP with Java in an Upper-Division Networking Course. In *Proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA)*, 7 pages, June 2001. Acceptance rate = 26%.

28. Rodney Tosten, Jeannie Albrecht, and Christyann Ferraro. Using Enterprise JavaBeans in a Computer Science Curriculum. In *Proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA)*, 7 pages, June 2000. Acceptance rate = 24%.

OTHER
PUBLICATIONS

29. A. J. Brush, Jeannie Albrecht, and Robert Miller. Smart Homes: From Research to Industry. *IEEE Pervasive Computing*, 19(2), April – June 2020.

30. David Irwin, A. J. Brush, Mike Hazas, and Jeannie Albrecht. Smart Homes: Implemented. *IEEE Pervasive Computing*, 18(2), April – June 2019.

31. A. J. Brush, Mike Hazas, and Jeannie Albrecht. Smart Homes, Inhabited. *IEEE Pervasive Computing*, 17(3), pages 78-82, July – September 2018.

32. A. J. Brush, Mike Hazas, and Jeannie Albrecht. Smart Homes: Undeniable Reality or Always Just around the Corner? *IEEE Pervasive Computing*, 17(1), pages 82-86, January – March 2018.

33. Janet Davis, Jeannie Albrecht, Christine Alvarado, Tzu-Yi Chen, Amy Csizmar Dalal, and Sohie Lee. Computer Science Faculty Careers At Liberal Arts Colleges. *XRDS: Crossroads, The ACM Magazine for Students*, 21(3), pages 13–15, March 2015.

34. Danny Yuxing Huang, Eric Kimbrel, Justin Cappos, and Jeannie Albrecht. Masking Network Heterogeneity with Shims. In *Poster Session of the Ninth USENIX Symposium on Operating Systems Design and Implementation (OSDI)*, October 2010.

35. Jeannie Albrecht and Ryan Braud. Application Management and Visualization with Plush. In *Evaluation Tools and Demo Session Proceedings of the Ninth IEEE Conference on Peer-to-Peer Systems (P2P)*, pages 89–90, September 2009.

36. Elliot Jaffe and Jeannie Albrecht. PlanetLab – P2P Testing in the Wild. In *Evaluation Tools and Demo Session Proceedings of the Ninth IEEE Conference on Peer-to-Peer Systems (P2P)*, pages 83–84, September 2009.

37. Sean Barker, Marius Catalin Iordan, Jeannie Albrecht, and Barath Raghavan. Kudzu: A Self Balancing P2P File Transfer System. In *Poster Session of the Third USENIX Workshop on Tackling Computer Systems Problems with Machine Learning Techniques (SysML)*, December 2008.

38. Jeannie Albrecht, Ryan Braud, Charles Killian, Priya Mahadevan, Kashi Vishwanath, and Amin Vahdat. An Integrated Development Environment for Distributed Systems. *SPIE Newsroom*, 3 pages, March 2008.

39. Jeannie Albrecht, Ryan Braud, Darren Dao, Nikolay Topilski, Christopher Tuttle, Alex C. Snoeren, and Amin Vahdat. Managing Distributed Applications with Plush. *;login: (The USENIX Magazine)*, 33(1), pages 32–38, February 2008.

40. Jeannie Albrecht, Ryan Braud, Darren Dao, John Jersin, Christopher Tuttle, Alex C. Snoeren, and Amin Vahdat. Plush: An Infrastructure for Managing and Visualizing Distributed Applications. In *Poster Session of the Seventh USENIX Symposium on Operating Systems Design and Implementation (OSDI)*, November 2006.

41. Jeannie Albrecht, Ryan Braud, Darren Dao, John Jersin, Christopher Tuttle, Alex C. Snoeren, and Amin Vahdat. Plush: An Infrastructure for Managing and Visualizing Distributed Applications. In *Demo Session of the Third ACM/USENIX Workshop on Real, Large Distributed Systems (WORLDS)*, November 2006.

42. Jeannie Albrecht, Christopher Tuttle, Alex C. Snoeren, and Amin Vahdat. Distributed Application Management Using Plush. In *Poster Session of the Sixth Grace Hopper Celebration of Women in Computing (GHC)*, October 2006. ACM Student Research Competition semi-finalist.

43. Jeannie Albrecht, Christopher Tuttle, Alex C. Snoeren, and Amin Vahdat. Distributed Application Management Using Plush. In *Poster Session of the Fourteenth IEEE Symposium on High Performance Distributed Computing (HPDC)*, July 2005.

44. Christopher Tuttle, Jeannie Albrecht, Alex C. Snoeren, and Amin Vahdat. Plush: A Tool for Remote Deployment, Management, and Debugging. In *Work In Progress Session of the Sixth USENIX Symposium on Operating Systems Design and Implementation (OSDI)*, December 2004.

45. Dejan Kostić, Adolfo Rodriguez, Jeannie Albrecht, and Amin Vahdat. Bullet: High Bandwidth Data Dissemination Using an Overlay Mesh. In *Poster Session of the ACM Special Interest Group on Data Communications (SIGCOMM)*, August 2003.

46. Dejan Kostić, Adolfo Rodriguez, Jeannie Albrecht, Abhijeet Bhirud, and Amin Vahdat. Beyond the Tree: High Bandwidth Streaming Using an Overlay Mesh. In *Work in Progress Session of the Fourth USENIX Symposium on Internet Technologies and Systems (USITS)*, March 2003.

TECHNICAL REPORTS

47. David Irwin, Jeff Chase, Laura Grit, Aydan Yumerefendi, and Jeannie Albrecht. Underware: An Exokernel for the Internet? Technical report, Duke University CS-2007-01, 8 pages, January 2007.

48. Jeannie Albrecht, Christoper Tuttle, Alex C. Snoeren, and Amin Vahdat. Distributed Application Management Using Plush. Technical report, University of California, San Diego, UCSD//CS2006-0864, 20 pages, July 2006.

49. Jeannie Albrecht and Yasushi Saito. RAMBO for Dummies. Technical report, HP Labs HPL-2005-39, 6 pages, February 2005.

50. David Oppenheimer, Jeannie Albrecht, David Patterson, and Amin Vahdat. Scalable Wide-Area Resource Discovery. Technical report, University of California, Berkeley UCB//CSD-04-1334, 22 pages, July 2004.

PANELS AND PRESENTATIONS

- "Sensor Driven Energy Management for Smart Buildings," at Google, November 2019.
- "Making Buildings Smarter: Using Technology to Achieve a More Sustainable Future," at Williams Admissions Open House, April 2018.
- "Panel Discussion: Inside the Williams Classroom," at Williams Fall Family Days, October 2017.
- "Making Buildings Smarter: Using Technology to Achieve a More Sustainable Future," at Williams Mini Reunion, October 2017.
- "Sensor Driven Energy Management for Smart Buildings," at Williams in Montana Campaign Event, September 2017.
- "Sustainability: The Ultimate Liberal Art," at Williams in Montana Campaign Event, September 2017.
- "Creating Information and Action for Building Data," at Living Future unConference in Seattle, WA, May 2017.
- "Making Buildings Smarter: Using Technology to Achieve a More Sustainable Future," at Williams Admissions Open House, April 2017.
- "Sensor Driven Energy Management for Smart Buildings," at Smith College, January 2017.
- "Making Buildings Smarter: Using Technology to Achieve a More Sustainable Future," at Williams Admissions Open House, August 2016.
- "Living Building Challenge," at Teach It Forward Campaign Launch Event, April 2016.
- "Scientific Leadership for the Century Ahead: Launching Division III Majors onto Post-Graduate Career Paths," at Teach It Forward Campaign Launch Event, February 2016.
- "Creating New User Experiences with IoT," at Grace Hopper Celebration of Women in Computing, with Cisco, October 2015.
- "P2P Systems Overview," at US Patent and Trademark Office tech fair, July 2015.

- "Making Buildings Smarter: Using Technology to Achieve a More Sustainable Future," at Class of 1966 Environmental Center Opening, April 2015.
- "GENI for Undergraduates," at GENI Workshop, November 2014.
- "Detecting and Predicting Home Occupancy in a Smart Home," at Williams College Faculty Lecture Series, February 2014.
- "Using GENI to Bring Big Systems to Small Schools," at GENI Engineering Conference 18, October 2013.
- "It's Not Easy Being Green (Yet)," at Daring Change: Imagining Williams' Future, April 2013.
- "Distributed Application Management with Gush," at Hiram College, March 2013.
- "Sensor-Driven Energy Management for Smart Buildings," at Hiram College, March 2013.
- "Sensor-Driven Energy Management for Smart Buildings," Sigma Xi Research Lecture Series at Williams College, November 2012.
- "Flattening Peak Electricity Demand in Smart Buildings," Sigma Xi Research Lecture Series at Williams College, November 2012.
- "Curriculum Workshop Report," at GENI Engineering Conference 14, July 2012.
- "Bringing Big Systems to Small Schools," at NSF Workshop on Distributed Systems Education, July 2012.
- "Distributed Application Management with Gush," at Fairfield University REU, July 2012.
- "Experiment Control Using Gush," at GENI/GREE Summer Camp at RIT, May 2012.
- "Selected Project Highlights: An Overview of Gush," at GENI Engineering Conference 11, July 2011.
- "Tutorial Session: Experiment Control Using Gush," at GENI Engineering Conference 11, July 2011.
- "Finding a 'Kneedle' in a Haystack: Detecting Knee Points in System Behavior," at Simplex, June 2011.
- "GENI in the Classroom," at GENI Engineering Conference 9, November 2010.
- "Achieving Experiment Repeatability on PlanetLab," at University of Utah (NSF Archive Workshop), May 2010.
- "Managing Distributed Applications using Gush," at TridentCom, May 2010.
- "Running Experiments with Gush," at GENI Engineering Conference 7, March 2010.
- "Academic Career Paths and Skills for Success," at SOSP Diversity Workshop, October 2009.
- "Application Management and Visualization with Plush," at P2P, September 2009.
- "PlanetLab – P2P Testing in the Wild," at P2P, September 2009.
- "PlanetLab Experimenter Tools," at GENI Engineering Conference 5, July 2009.
- "Distributed Application Management with Gush," at Bowdoin College, May 2009.
- "Distributed Application Management with Gush," at Union College, April 2009.
- "(More) GENI Experiment Control Using Gush," at GENI Engineering Conference 4, March 2009.
- "Bringing Big Systems to Small Schools," at SIGCSE, March 2009.
- "GENI Experiment Control Using Gush," at GENI Engineering Conference 3, October 2008.
- "Other Things You Can Do with a Degree in Mathematics: Computer Science," at Summer Mathematics Program for Women at Carleton College, July 2008.
- "Improving Scalability and Fault Tolerance in an Application Management Infrastructure," at LASCO, June 2008.
- "Remote Control: Distributed Application Configuration and Management with Plush," at University of Massachusetts, Amherst, May 2008.
- "Supporting Experiment Workflows in GENI," at GENI Engineering Conference 2, March 2008.
- "Remote Control: Distributed Application Configuration and Management with Plush," Williams College Science Lunch, November 2007.
- "Remote Control: Distributed Application Configuration and Management with Plush," at LISA, Nov 2007.
- "Making the Transition to a Teaching-oriented Institution," Panel at Grace Hopper Celebration of Women in Computing, October 2007.
- "Learning by Doing: Using Internships to Discover Where You Belong," Panel at Grace Hopper Celebration of Women in Computing, October 2007.
- "Getting Hired: How to Get the Most Out of Your Internships," BoF session at Grace Hopper Celebration of Women in Computing, October 2007.
- "Remote Control: Distributed Application Configuration and Management with Plush," at Williams College, January 2007.
- "Remote Control: Distributed Application Configuration and Management with Plush," at St. Mary's College of Maryland, January 2007.
- "Remote Control: Distributed Application Configuration and Management with Plush," at Washington and Lee

University, January 2007.

- "Loose Synchronization for Large-Scale Networked Systems," at USENIX, June 2006.
- "Applying Caching Techniques for Dynamic Personalized Content in Software Engineering Projects," at PDPTA, June 2003.
- "Exploring Voice Over IP with Java in an Upper-Division Networking Course," at PDPTA, June 2001.
- "Using Enterprise JavaBeans in a Computer Science Curriculum," at PDPTA, June 2000.

WORKSHOPS ORGANIZED

- "Introduction to GENI Workshop." GENI workshop – Brought together researchers and educators, particularly from underrepresented groups, to discuss how to effectively use GENI tools in education and research. NSF/GENI workshop at Northeastern Illinois University in Chicago, IL. September 2015.
- "Introduction to GENI Workshop." GENI workshop – Brought together researchers and educators, particularly from underrepresented groups, to discuss how to effectively use GENI tools in education and research. NSF/GENI workshop at Morgan State University in Baltimore, MD. November 2014.
- "Prototyping and Deploying Experimental Software Defined Exchanges." Discussed the development and deployment strategies for experimental Software Defined Exchanges (SDXs). NSF/GENI workshop in Washington, D.C. June 2014.
- "GENI in Education." Encouraged the use of GENI in undergraduate and graduate networking and distributed systems classes. NSF/GENI workshop in Brooklyn, NY. October 2013.
- "Designing Tools and Curricula for Undergraduate Courses on Distributed Systems." Brought together researchers and educators to discuss how to integrate new technologies with conventional topics in Distributed Systems and Computer Networks. NSF workshop in Boston, MA. July 2012.

FUNDING

- "Utility-driven Smart Energy Services," NSF Building Capacity for Innovation Award. NSF Award: 1534080. Sub-contract from UMass Amherst. Amount: $42,490. Total amount of award: $1,000,000. September 2015 – August 2018.
- "EAGER: Scalable Energy Monitoring and Visualization in a Living Building, " NSF EAGER Award. NSF Award: 1450090. Amount $161,260. October 2014 – September 2016.
- "A Virtual Computer Networking Lab," NSF/BBN GENI Development and Prototyping Grant. NSF Award: 1346688. Sub-contract from UMass Amherst. Amount $31,639. Total amount of award: $301,185. November 2013 – October 2016.
- "NSF Workshop on Designing Tools and Curricula for Undergraduate Courses in Distributed Systems." NSF Award: 1231167. Amount: $67,175. July 2012.
- "CAREER: Mobile Application Management," NSF CAREER Award. NSF Award: 0845349. Amount: $400,000. September 2009 – August 2014.
- "Teaching Undergraduate Distributed Systems using Cloud Computing," Amazon EC2 Teaching Grant for CSCI 339. Cumulative amount: $7,900. Fall 2009, Spring 2012, Spring 2014.
- "GENI Experiment Control Using Gush," NSF/BBN GENI Development and Prototyping Grant. NSF Award: 0834243. Amount: $407,833. July 2008 – September 2015.