

William Jannen

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Education

Ph.D, Stony Brook University, Computer Science	2017
BA, Williams College, Computer Science and Economics	2009

Awards, Fellowships, and Grants

Best Paper Nominee , 16th USENIX Conference on File Systems and Storage Technologies	2018
Best Paper , 14th USENIX Conference on File Systems and Storage Technologies	2016
Best Paper Nominee , 13th USENIX Conference on File Systems and Storage Technologies	2015
Six-month Studio Residency , Triangle Arts Association (as part of Talk Is Cheap: Unincorporated Language Laboratories)	2015–2016
Enhanced Computer Science Fellowship , Stony Brook University	2010
Elected to Sigma Xi , Williams College	2010

Professional Experience

Assistant Professor , Computer Science, Williams College	2017–Present
Visiting Lecturer , Computer Science, Williams College	2016–2017
Intern , Advanced Technology Group, NetApp Inc.	Summer 2015
Research Assistant , OSCAR Lab, Stony Brook University	2010–2016
Scientific Programmer , Department of Physics, Williams College	Summer 2011
Teaching Assistant , Stony Brook University	2010–2011
Scientific Programmer , Department of Physics, Williams College	2009–2010
Intern , Alternative Strategies, Geode Capital Management	Summer 2009

Publications

Conference, Journal, and Magazine

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| Yang Zhan, Alexander Conway, Eric Knorr, Yizheng Jiao, Michael A. Bender, Martin Farach-Colton, William Jannen, Rob Johnson, Donald E. Porter, and Jun Yuan. The full path to full-path indexing. In <i>Proceedings of the USENIX Conference on File and Storage Technologies (FAST)</i> , 2018. Best paper nominee. | 2018 |
| Alexander Conway, Ainesh Bakshi, Yizheng Jiao, William Jannen, Yang Zhan, Jun Yuan, Michael A. Bender, Rob Johnson, Bradley C. Kuzmaul, Donald E. Porter, and Martin Farach-Colton. How to age your file system. <i>:login; Magazine</i> , 42(2):6–11, 2017. | 2017 |
| Jun Yuan, Yang Zhan, William Jannen, Prashant Pandey, Amogh Akshintala, Kanchan Chandnani, Pooja Deo, Zardosht Kasheff, Leif Walsh, Michael Bender, Martin Farach-Colton, Rob Johnson, Bradley C. Kuzmaul, and Donald E. Porter. Writes wrought right, and other adventures in file system optimization. <i>ACM Transactions on Storage (TOS)</i> , 13(1):3:1–3:26, 2017. | 2017 |
| Alexander Conway, Ainesh Bakshi, Yizheng Jiao, Yang Zhan, Michael A. Bender, William Jannen, Rob Johnson, Bradley C. Kuzmaul, Donald E. Porter, Jun Yuan, and Martin Farach-Colton. File systems fated for senescence? nonsense, says science! In <i>Proceedings of the USENIX Conference on File and Storage Technologies (FAST)</i> , 2017. | 2017 |
| William Jannen, Michael Bender, Martin Farach-Colton, Rob Johnson, Bradley C. Kuzmaul, and Donald E. Porter. Lazy analytics: Let other queries do the work for you. In <i>Proceedings of the USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage)</i> , 2016. | 2016 |
| Jun Yuan, Yang Zhan, William Jannen, Prashant Pandey, Amogh Akshintala, Kanchan Chandnani, Pooja Deo, Zardosht Kasheff, Leif Walsh, Michael Bender, Martin Farach-Colton, Rob Johnson, Bradley C. Kuzmaul, and Donald E. Porter. Optimizing every operation in a write-optimized file system. In <i>Proceedings of the USENIX Conference on File and Storage Technologies (FAST)</i> , pages 1–14, 2016. Awarded Best Paper. | 2016 |
| Michael A. Bender, Martin Farach-Colton, William Jannen, Rob Johnson, Bradley C. Kuzmaul, Donald E. Porter, Jun Yuan, and Yang Zhan. An introduction to B ^e -trees and write-optimization. <i>:login; Magazine</i> , 40(5):22–28, 2015. | 2015 |
| William Jannen, Jun Yuan, Yang Zhan, Amogh Akshintala, John Esmet, Yizheng Jiao, Ankur Mittal, Prashant Pandey, Phaneendra Reddy, Leif Walsh, Michael Bender, Martin Farach-Colton, Rob Johnson, Bradley C. Kuzmaul, and Donald E. Porter. BetrFS: Write-optimization in a kernel file system. <i>ACM Transactions on Storage (TOS)</i> , 11(4):18:1–18:29, 2015. | 2015 |
| Cata Mariaelena Elisabeth, Silvia Juliana Mantilla Ortiz, and Bill Jannen. Moving toward lucha and liberación. <i>Journal of Curriculum and Pedagogy</i> , 12(2):152–3, 2015. | 2015 |
| William Jannen, Jun Yuan, Yang Zhan, Amogh Akshintala, John Esmet, Yizheng Jiao, Ankur Mittal, Prashant Pandey, Phaneendra Reddy, Leif Walsh, Michael Bender, Martin Farach-Colton, Rob Johnson, Bradley C. Kuzmaul, and Donald E. Porter. BetrFS: A right-optimized write-optimized file system. In <i>Proceedings of the USENIX Conference on File and Storage Technologies (FAST)</i> , pages 301–315, 2015. Best paper nominee. | 2015 |

Chia-Che Tsai, Kumar Saurabh Arora, Nehal Bandi, Bhushan Jain, William Jannen, Jitin John, Harry A Kalodner, Vrushali Kulkarni, Daniela Oliveira, and Donald E. Porter. Cooperation and security isolation of library OSES for multi-process applications. In <i>Proceedings of the ACM European Conference on Computer Systems (EuroSys)</i> , 2014.	2014
Julian M. Hess, William K. Jannen, and Daniel P. Aalberts. Modeling unpairing costs for fast computation of the net binding free energy of an oligo to an mRNA target. <i>Biophysical Journal</i> , 106(2):285a, 2014.	2013
William Jannen, Chia-Che Tsai, and Donald E. Porter. Virtualize storage, not disks. In <i>Proceedings of the USENIX Workshop on Hot Topics in Operating Systems (HotOS)</i> , 2013.	2013
Daniel P. Aalberts and William K. Jannen. Visualizing RNA base-pairing probabilities with RNAbow diagrams. <i>RNA</i> , 19(4):475–478, 2013.	2013

Newspaper

Bill Jannen. What is net neutrality and why is it important? <i>The Berkshire Eagle</i> , Jan 2018.	2017
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Conference Posters

Jun Yuan, Yang Zhan, William Jannen, Prashant Pandey, Amogh Akshintala, Kanchan Chandnani, Pooja Deo, Zardosht Kasheff, Leif Walsh, Michael A. Bender, Martin Farach-Colton, Rob Johnson, Bradley C. Kuszmaul, and Donald E. Porter. Optimizing every write in a write-optimized file system. Poster at the ACM SIGOPS Symposium on Operating Systems Principles (SOSP), 2015.	2015
William Jannen, Jun Yuan, Yang Zhan, Amogh Akshintala, Yizheng Jiao, Ankur Mittal, Prashant Pandey, Phaneendra Reddy, Leif Walsh, Johnathan Esmet, Michael Bender, Martin Farach-Colton, Rob Johnson, Bradley C. Kuszmaul, and Donald E. Porter. BetrFS: Moving in the write direction. Poster at New England Networking Systems day (NENS), 2014.	2014
Nehal Bandi, Gurpreet Chadha, Chia che Tsai, William Jannen, and Donald Porter. Graphene: Ultra-lightweight virtualization of a library OS. Poster at CEWIT Conference, 2011.	2011
William K. Jannen, Rami Al-Rfou', and Nikhil Patwarhan. Trackmenot-so-good-after-all. Poster at CEWIT Conference, 2011.	2011
Julian Hess, William K. Jannen, and Daniel P. Aalberts. Computing effective free energy to bind an oligo to an mRNA: the BINDIGO-MFT algorithm. Poster at RNA Science and Its Applications: A Look Toward the Future, 2011.	2011
Daniel P. Aalberts and William K. Jannen. RNAbows: an intuitive tool for visualizing RNA secondary structures. Poster at Gordon Conference: Post-Transcriptional Gene Regulation, The Biology of, 2010.	2010

Community Engagement

Mobile Print Power, a multi-generational printmaking collective that uses silkscreen printmaking to engage communities and explore social and cultural situations. Mobile Print Power engages the community during its many public projects, and collaboratively develops artwork at weekly open workshops based on discussions about these community exchanges. Members range in age from middle school to adult, and we challenge ourselves to be a truly collaborative group despite differences in age, gender, race, education, and experience as we engage issues of social justice.

2013–2016

Books, Beats, and Visions, a multilingual reading group for *Octavia's Brood*, an English-only anthology. Using simultaneous interpretation and translation of reading group materials, we facilitated an English/Spanish multilingual reading group in a community that includes both bilinguals and English or Spanish monolinguals.

Aug 2015–Jan 2016

La Ruedada, a weekly open workshop that taught the basics of Casino Rueda, a popular Cuban dance form. Together with youth at Immigrant Movement International, we explored immigration narratives, and we collaboratively developed new dance steps and poetry to catalogue these experiences. We challenged traditional gender roles, rejecting the notion that males “lead” and females “follow,” and instead treated dance couples as a partnership. The group has performed publicly, led a workshop at the 2015 *Open Engagement* public art conference, and published an article in the *Journal of Curriculum and Pedagogy* to share our experiences.

2013–2015