Walter Cai

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Education

- University of Washington 2016-present
  - Gary Kildall Endowed Fellowship
  - PhD in Database Group
- University of Wisconsin 2014-2016
  - Masters in Computer Science
  - GPA: 3.944
- Cornell University 2010-2014
  - Summa Cum Laude in Mathematics
  - Double Major in Mathematics and Economics

Projects & Work History

- Gamalon Summer 2016 Internship 2016
  - Developed framework for dynamic bayesian inference on streaming data sources
  - Contributed to probabilistic programming language codebase
  - Researched probabilistic programming as a potential solution to generic dirty data parsing
- Johnson Controls Data Science Internship 2016
  - Remote research of JCI's data stores
- Value Normalization Project 2015-2016
  - Apply query optimization methodology to the problem of human effort in machine clustering cleanup
  - Generate relevant software package with production level usability
- REU's
  - RIPS REU at UCLA in affiliation with the Aerospace Corporation 2013
    - Computational efficiency for Satellite Visibility and Dilution of Precision using Level Set Methods
    - Member of 4-man team at IPAM and the Aerospace Corporation
  - DIMACS REU at Rutgers 2012
    - Extremal Combinatorics and Algebraic Topology on Vietoris-Rips Complexes
- Head Tutor at Cornell Math Support Center 2012-2014, Head Tutor: 2013-2014
  - Assisted students with Mathematics, Statistics, Economics, Computer Science coursework
  - Produced Operations Schedule and performed interviews

Programming Languages [in descending order of familiarity]

- Python, Java, C/C++, Matlab

Publications

- *Fast Generation and Tracking of GPS Visibility and Dilution of Precision Regions Using Level Set Methods*, Joint Math Meeting 2014
- *On the optimization of 1-cycle persistence under the Vietoris-Rips complex*, Joint Math Meeting 2014
- *Fast Generation and Tracking of GNSS Visibility and Dilution-of-Precision Regions Using Level Set Methods*, Institute of Navigation GNSS+ 2014
- *The Gardener's Problem for Web Information Monitoring*, Conference on Information and Knowledge Management 2009