Ross Mawhorter

19 Concepcion Way, Santa Cruz, CA
☎ 909-524-6463 ✉ rmawhorter@g.hmc.edu GitHub

Education

University of California Santa Cruz
Computer Science PhD Program *September 2019*

Relevant Coursework: Artificial Intelligence, Numerical Optimization, Randomized Algorithms, Nonlinear Control Theory, Computer Architecture, Information Theory

Harvey Mudd College
Bachelor of Science in Computer Science and Math, Political Science Minor *December 2018*
Donald Chamberlain Computer Science Research Award

Relevant Coursework: Advanced Topics in Algorithms, Advanced Real Analysis, Complex Analysis, Compiler Design, Computability and Complexity, Programming Languages, Computer Systems, Intermediate Probability, Abstract Algebra, Data Structures, Differential Equations, Linear Algebra

Publications

Latent Gaussian Activity Propagation: Using Smoothness and Structure to Separate and Localize Sounds in Large Noisy Environments
Neural Information Processing Systems *December 2018*

Multiple Optimal Reconciliations under the Duplication-Loss-Coalescence Model
Asia-Pacific Bioinformatics Conference *January 2019*

Towards the Formalization and Analysis of R
Formal Methods in Computer-Aided Design: Student Forum *October 2018*

Research Experience

Researcher
Harvey Mudd College *Summer 2019, Summer 2017*
Algorithmic Computational Biology research into gene tree and species tree reconciliation with Professors Wu and Libeskind-Hadas.

Researcher
Harvard University *Summer 2018*
Programming Languages/Security research developing symbolic execution for the R language.

Clinic
3-Dimensional Audio Systems for Intel Sports *September 2017 – May 2018*
Working with a team of Mudd students and Intel employees to locate and isolate sounds given noisy recordings.

Summer Research Intern
Jet Propulsion Laboratory *Summer 2011*
Python Programming and Web Development for the Dynamic and Real-Time Simulation Lab

Work Experience

Teaching Assistant
Harvey Mudd College *Fall 2017 – Fall 2019*
Grading and Tutoring for the Computational Complexity, Algorithms, and Programming Languages courses

Programmer
Sprocket Digital *2015–2016*
Writing drivers in C for a commercial Flow Cytometer manufactured by BD microsystems

Technical Skills

UNIX, Python, C/C++, Java, Haskell, Ocaml, RUST, Javascript/HTML, C#, R, MATLAB, Git, SVN, LaTeX, Keras, Scikit-learn, Tensorflow

Hobbies

Piano, Badminton, Reading, Board Games, Hiking, Cooking