Krystal Maughan

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Blog: https://kammitama5.github.io/

Research Interests: Type Theory, Refinement Types, Dependent Types, Debugging Systems, Browser Optimization and Security

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EDUCATION

PhD Candidate (Fall)   2019-present
Area: Programming Languages Research
Compilers, Haskell, Neural Networks

Ithaca College (one semester at Cornell University)   2004-2008
Degree: Bachelor's (BFA 2008)
Area: Cinema, Film Studies

Glendale Community College   2015-2019
Degree : Associate's
Advisor: Kristina Shroyer, Tony Biehl
Subjects: *Discrete Structures, Data Structures (C++), Intro to Algorithms (Java), C++, Advanced C++, Programming Languages (implementing features to made-up language called "Minus Minus")*

Skills: Haskell, Python, C++, LaTeX, Jupyter, Git

RELEVANT WORK EXPERIENCE

Mercury (San Francisco)   2019
Wrote Haskell back-end application for stealth fintech startup as software intern
Used Haskell, Stack, Yesod, Nix, Postgres. Supervised by Max Tagher. (Summer)

Apple, Inc. (Sunnyvale)   2019
Software Intern (Spring)

Google Summer of Code for Haskell.org (remote)   2018
Wrote Debugging tools for CodeWorld[1],
A Google project sponsored by Haskell.org, under
Supervision of Chris Smith (Google) and
Gabriel Gonzalez (Awake Security).
Used Haskell, GHCJS, Cabal.

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[1] CodeWorld: https://github.com/google/codeworld/commits?author=kammitama5

Mozilla, Increasing Rust's Reach (remote)   **2018**
Worked on Implied Boolean Predicates[2],
For Command line tools in Rust, under
Supervision of Aaron Power and Ed Page.
Worked in Rust, used Travis Continuous Integration

Internet Brands, (El Segundo)   **2018**
Worked as automation tester, using Selenium, Python, JIRA, Confluence

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MERIT-BASED GRANTS / SCHOLARSHIPS
Helium Grant (chosen as 1 of 11 out of 700)   2018
EaRl Career Scholarship, (R Data Science Scholarship) - declined offer   2018
Udacity Bertelsmann Data Science Scholarship - declined offer   2017
AT and T Aspire to Tech grant Winner   2017
NCAS Workshop participant (NASA Community College Aerospace Scholars)   2016
Who's Who/ Peggy Williams Memorial Scholarship/ Best BFA Award (Best of Major) 2008

OTHER GRANTS/ FELLOWSHIPS
MSRI (Mathematical Sciences Research Institute) Grants to attend   2019
Connections for Women:
  - *Derived Algebraic Geometry, Birational Geometry and Moduli Spaces workshop*
  - *Introductory Workshop: Derived Algebraic Geometry and Birational Geometry
    And Moduli Spaces*

NASA L'Space Academy (virtual student team & mentorship with NASA scientists)   2019
Racket Summer School (National Science Foundation Grant)   2018
PLMW (Programming Languages Mentorship Workshop)   2018
ICFP (International Conference Functional Programming)
PLMW(Programming Languages Mentorship Workshop)   2018
PLDI (Programming Languages Design and Implementation)
OPLSS (Oregon Programming Languages Summer School Grant) - declined offer   2018

Conference Grants to attend:
RustConf 2018, LambdaConf 2017/2018, Strange Loop 2017, Software Craftsmanship
North America (SCNA), Clojure Conj 2016/2017, Clojure West 2017, Chrome Dev Summit 16-18

SERVICE
Student volunteer, ICFP (International Conference Functional Programming)   2018
Student volunteer, PLDI (Programming Languages Design and Implementation)   2018
Student volunteer, POPL (Principles of Programming Languages)   2018

PUBLICATIONS / POSTS / OTHER
Google Summer of Code "[Breaking the Time-Space Barrier with Haskell](#)"   2018
Member of ACM Climate Wikipedia Team (updating wiki pages, research)   2019

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[2] Assert Predicates.rs: https://github.com/assert-rs/predicates-rs/commits?author=kammitama5
  Assert Cmd.rs: https://github.com/assert-rs/assert_cmd/commits?author=kammitama5