# **Krystal Maughan**

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Github: https://github.com/kammitama5

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

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

**EDUCATION** 

Ithaca College (one semester at Cornell University)

2004-2008

Degree: Bachelor's (BFA 2008) Area: Cinema, Film Studies Minor: Art History, Theatre

Advisors: Elisabeth Nonas, Jennifer Jolly

Glendale Community College

2015-Present

Degree : Associate's Area: Computer Science

Advisor: Kristina Shroyer, Tony Biehl

**Subjects:** Discrete Structures, Data Structures (C++), Advanced Data Structures (C++), Intro to Algorithms (Java), C++, Advanced C++, Programming Languages (implementing features to made-up language called "Minus Minus"), Assembly I

Skills: Haskell, Rust, C++, Python, Racket, 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.

#### Google Summer of Code for Haskell.org (remote)

2018

Wrote Debugging tools for CodeWorld<sup>1</sup>, A Google project sponsored by Haskell.org, under Supervision of Chris Smith (Google) and Gabriel Gonzalez (Awake Security). Used Haskell, GHCJS, Cabal.

### Mozilla, Increasing Rust's Reach (remote)

2018

Worked on Implied Boolean Predicates<sup>2</sup>,

<sup>&</sup>lt;sup>1</sup> CodeWorld: https://github.com/google/codeworld/commits?author=kammitama5

<sup>&</sup>lt;sup>2</sup> Assert Predicates.rs: <a href="https://github.com/assert-rs/predicates-rs/commits?author=kammitama5">https://github.com/assert-rs/predicates-rs/commits?author=kammitama5</a>
Assert Cmd.rs: <a href="https://github.com/assert-rs/assert\_cmd/commits?author=kammitama5">https://github.com/assert-rs/assert\_cmd/commits?author=kammitama5</a>

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   |            |
| 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       |
| Presidential Merit Scholarship  | 2004-2008  |
| OTHER GRANTS/ FELLOWSHIPS   |            |
| MSRI (Mathematical Sciences Research Institute) Grants to attend Connections for Women:   | 2019       |
| <ul> <li>Derived Algebraic Geometry, Birational Geometry and Moduli Spaces worksho</li> <li>Introductory Workshop: Derived Algebraic Geometry and Birational Geometry</li> <li>And Moduli Spaces</li> </ul> | pp         |
| 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)  | _0.0       |
| OPLSS (Oregon Programming Languages Summer School Grant) - declined offer   | 2018       |
| Conference Grants to attend:  |            |
| RustConf 2018, LambdaConf 2017/2018, Strange Loop 2017, Software Craftsmanship  | ס          |
| North America (SCNA), Clojure Conj 2016/2017, Clojure West 2017, Chrome Dev Sur   | mmit 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       |
| TALKS   |            |
| Lightning talk on Denotational Semantics, 3rd Anniversary of LearnTeachCode  PUBLICATIONS / POSTS / OTHER   | 2018       |
| Google Summer of Code " <u>Breaking the Time-Space Barrier with Haskell</u> "   | 2018       |
| 40th Anniversary NASA Tech briefs "Why I chose to become an Engineer"   | 2010       |
| Member of ACM Climate Wikipedia Team (updating wiki pages, research)  | 2019       |
| wernoer of Acivi climate viripedia ream (updating with pages, research)   | 2013       |