SAMUEL TAY

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education		
	Ph.D., Statistics	2019 - Present
	University of Washington	Seattle, WA
	B.A., Mathematics & Scientific Computing	2009 - 2013
	Kenyon College	Gambier, OH

Thesis: *Logic via Algebra*. Awarded distinction.

GPA: 3.91

Class Rank: 16/409

publications

Nathan Gabriel, Katherine Peske, Lara Pudwell, and Samuel Tay. 2012. "Pattern Avoidance in Ternary Trees." *Journal of Integer Sequences* 15:12.1.5.

honors & awards

Phi Beta Kappa Society

Pi Mu Epsilon National Mathematics Honor Society

Newman's Own Foundation Scholarship	2009-2013
Zakov Family Scholarship	2011-2013
John H. Dunlap IV Scholarship	2012-2013

Funding for deserving mathematics majors who have demonstrated excellence in the programming and/or use of computer applications.

Reginald B. Allen Prize	2013

Annual award to a student who the professors of the Department of Mathematics decide has done the most outstanding work in mathematics.

Reginald and Bessie Allen Memorial Fund	2011-2012

The income assists a student having exceptional promise in mathematics who is recommended by the chair of the Department of Mathematics.

Wendell D. Lindstrom Memorial Prize	2011

Award for extraordinary work by first or second year students in mathematics.

MAA Outstanding Presentation Prize, Joint Mathematics Meeting	2011

research experience

Research Assistant	Summer 2011
AstroParticule et Cosmologie	Paris, France

Conducted research investigating the correlation of temperature variation and phase noise for LOT (LISA On Table), an optical simulator for the LISA mission, under Dr. Hubert Halloin.

Research Assistant   Summer 2010
Valparaiso University   Valparaiso, IN

> Explored pattern avoidance in ternary trees in a team of three undergraduate students under mentor Dr. Lara Pudwell.

teaching
experience

Math Tutor   Summer 2012
Independent Support Services   Rock Hill, NY

> Tutored an autistic client in math and successfully increased placement exam scores, allowing the client to pursue their desired program at the SUNY Nassau Community College.

Lead Tutor   January 2011 - May 2013
Kenyon College   Gambier, OH

> Attended class and assisted with teaching Calculus and Maple syntax.

work
experience

Backend Software Engineer   December 2018 - September 2019
SimSpace Corporation   Remote

> Created a realistic network simulation product for cyber security training.

> Leveraged advanced type system features to achieve a high level of code safety.

> Languages: Haskell, SQL.

Full Stack Developer   August 2017 - September 2019
Wrinkl Inc.   Remote

> Developed a websocket-driven chat application, supporting web, iOS, and Android apps.

> Languages: Haskell, SQL, Nix.

Software Developer   April 2017 - August 2017
ExpandShare   Charleston, SC

> Built core features and microservices for a Learning Manage System within Django.

> Languages: Python, Javascript.

Applications Engineer   May 2014 - February 2017
Blue Acorn   Charleston, SC

> Developed reusable modules in an object oriented MVC eCommerce framework.

> Founded an educational Functional Programming group with weekly meetups.

> Led an agile team and mentored junior developers.

> Languages: PHP, Javascript, Bash.

Programming Languages

Fluent in Haskell, Python, Javascript, PHP.

Intermediate experience with C, C++, Bash.

Mathematical Software

Maple, Mathematica, Matlab.

Other Technologies

Kubernetes, Docker, Ansible, RabbitMQ, Postgres, MySQL.