SAMUEL TAY

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samtay

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education

B.A., Mathematics & Scientific Computing, Kenyon College, 2013.

> 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.

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.

Software Developer August 2017 - Present
Wrinkl Inc. Charleston, SC

Developed a websocket-driven chat application in Haskell.

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

Languages: Haskell, Nix.

Software Developer April 2017 - August 2017
ExpandShare Charleston, SC

Built core features and microservices for a Learning Manage System.

Languages: Python, Javascript.

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

Developed reusable modules in an object oriented MVC eCommerce framework.

Contributed to infastructure in the form of deployment tools and a docker composition-machine management tool.

Led an agile team and mentored junior developers.

Languages: PHP, Javascript, Bash.

Programming Languages

Fluent in Haskell, Javascript, PHP, Python.

Intermediate experience with C, C++, Bash.

Mathematical Software

Maple, Mathematica, Matlab.

Other Technologies

Docker, Ansible, RabbitMQ, Postgres, MySQL.