





# SAMUEL TAY

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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.

teaching experience	<i>Math Tutor</i>	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.	
	<i>Lead Tutor</i>	January 2011 - May 2013
	Kenyon College	Gambier, OH
	Attended class and assisted with teaching Calculus and Maple syntax.	
work experience	<i>Software Developer</i>	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.	
	<i>Software Developer</i>	April 2017 - August 2017
	ExpandShare	Charleston, SC
	Built core features and microservices for a Learning Manage System.	
	Languages: Python, Javascript.	
	<i>Applications Engineer</i>	May 2014 - February 2017
	Blue Acorn	Charleston, SC
	Developed reusable modules in an object oriented MVC eCommerce framework.	
	Contributed to infrastructure 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.	
technical skills	<i>Programming Languages</i>	
	Fluent in Haskell, Javascript, PHP, Python.	
	Intermediate experience with C, C++, Bash.	
	<i>Mathematical Software</i>	
	Maple, Mathematica, Matlab.	
	<i>Other Technologies</i>	
	Docker, Ansible, RabbitMQ, Postgres, MySQL.	