

## Samuel Chong Tay

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| <b>TODO</b>                | Add more technical skills in computing skills  |  |
| <b>EDUCATION</b>           | <i>Bachelor of Arts</i><br><i>Kenyon College</i><br><i>Major: Mathematics; Concentration: Scientific Computing</i><br><i>GPA: 3.91</i><br><i>Relevant Coursework:</i> Data Structures and Program Design, Parallel Computing, Computational Algebraic Coding Theory, Calculus, Linear Algebra, Mathematical Logic, Number Theory, Abstract Algebra, Real Analysis  | 2013<br>Gambier, OH  |
| <b>HONORS AND AWARDS</b>   | <i>Phi Beta Kappa Society</i><br><i>Pi Mu Epsilon National Mathematics Honor Society</i><br><i>Newman's Own Scholarship</i> , Kenyon College<br><i>Zakov Family Scholarship</i> , Kenyon College<br><i>John H. Dunlap IV Scholarship</i> , Kenyon College. Funding for deserving mathematics majors who have demonstrated excellence in the programming and/or use of computer applications.<br><i>Distinction on Senior Thesis</i> , Kenyon College, 2013<br><i>The Reginald B. Allen Prize</i> , Kenyon College, 2013. Annual award to a student who the professors of the Department of Mathematics decide has done the most outstanding work in mathematics.<br><i>The Wendell D. Lindstrom Memorial Prize</i> , Kenyon College, 2011<br><i>Undergraduate Poster Session Award</i> , Joint Mathematics Meeting, 2011 |  |
| <b>RESEARCH EXPERIENCE</b> | <i>Research Assistant</i><br>AstroParticule et Cosmologie <ul style="list-style-type: none"><li>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.</li></ul><br><i>Research Assistant</i><br>Valparaiso University <ul style="list-style-type: none"><li>Explored pattern avoidance in ternary trees (combinatorial mathematics) in a team of three undergraduate students under mentor Dr. Lara Pudwell.</li></ul>   | Summer 2011<br>Paris, France<br><br>Summer 2010<br>Valparaiso, IN          |
| <b>TEACHING EXPERIENCE</b> | <i>Math Tutor</i><br>Independent Support Services <ul style="list-style-type: none"><li>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.</li></ul><br><i>Lead Tutor</i><br>Kenyon College, Math and Science Skills Center <ul style="list-style-type: none"><li>Attend class and assist with teaching Calculus and Maple syntax.</li></ul>   | Summer 2012<br>Rock Hill, NY<br><br>January 2011 - May 2013<br>Gambier, OH |

**WORK  
EXPERIENCE**

*Software Engineer*  
Wrinkl, Inc.

August 2017 - Present  
Charleston, SC

- Full stack development of a websocket-driven chat application in Haskell.
- Leverage advanced type system features to achieve a high level of code safety.
- Languages: Haskell, Nix.

*Applications Engineer*  
Blue Acorn

May 2014 - February 2017  
Charleston, SC

- Developed reusable modules in an object oriented MVC eCommerce framework.
- Contributed to internal infrastructure in the form of deployment tools, Hipchat addons, and a docker composition-machine management tool.
- Languages: PHP, Javascript, Bash.

**COMPUTER  
SKILLS**

*Languages:* Fluent in Haskell, Javascript, PHP, Python, C++. Experience with Bash, C.

*Operating Systems:* Linux and Mac OS.

**PUBLICATIONS**

*Pattern Avoidance in Ternary Trees*

Nathan Gabriel, Katherine Peske, Lara Pudwell, and Samuel Tay

Journal of Integer Sequences 15 (2012) 12.1.5.

<http://arxiv.org/abs/1110.2225>