

# Samuel Chong Tay

SOFTWARE ENGINEER · MATHEMATICIAN

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## Summary

Skilled problem solver with a background in pure mathematics. 2+ years experience in web development, backend/infrastructure, and devops. Proven ability to quickly ramp up on new languages/technologies. Efficiency nerd who loves Vim, Linux, and xmonad, and enjoys customizing the development environment. Interested in learning new technologies and tools to solve complex, challenging problems.

## Experience

### Senior Applications Engineer

May 2014 - Feb 2017

BLUE ACORN

Charleston, SC

- Streamlined deployment pipeline across the organization.
- Pushed the most contributions to internal modules.
- Improved developer experience via Tampermonkey scripts and zsh plugins.
- Achieved the most "Play of the Sprint" awards in 2015.
- Promoted from Apprentice to Senior within two years for exemplary work quality and productivity.

### Reporting Analyst

Sep 2013 - May 2014

SIB DEVELOPMENT & CONSULTING

Charleston, SC

- Contributed to unlogging the largest bottleneck in company operations, using Acrobat and Excel.

### Research Assistant

Summer 2011

ASTROPARTICULE ET COSMOLOGIE

Paris, France

- Conducted research and data analysis in 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 (combinatorial mathematics) in a team of three undergraduate students under mentor Dr. Lara Pudwell.

## Skills

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| <b>Development</b> | <ul style="list-style-type: none"><li>• Agile experience in both scrum and kanban, along with Jira, Workfront, and ZenHub.</li><li>• Experience leading an agile team and mentoring junior developers.</li><li>• Very efficient workflow from requirements gathering to development execution.</li><li>• Experience with direct client interactions and discussing complex technological details with nontechnical stakeholders.</li></ul> |
| <b>Languages</b>   | <ul style="list-style-type: none"><li>• Fluent in PHP, Javascript, and C++.</li><li>• Experience with Haskell, Bash, Python, C.</li></ul>  |
| <b>Software</b>    | <ul style="list-style-type: none"><li>• Mastery of Magento.</li><li>• Experience with technologies such as Docker, Ansible, NodeJS, Symfony, MySQL, RabbitMQ.</li></ul>  |
| <b>Workflow</b>    | <ul style="list-style-type: none"><li>• Proficient in Linux and MacOS.</li><li>• Enjoy maximizing productivity with development tools such as git, vim, tmux, xmonad, zsh, and ngrok.</li></ul>  |

## Education

### Kenyon College

Gambier, OH

B.S. IN MATHEMATICS AND SCIENTIFIC COMPUTING

Sep 2009 - May 2013

- Awarded Distinction on Senior Thesis
- Achieved GPA of 3.91

## Publications

### Pattern Avoidance in Ternary Trees

Journal of Integer Sequences

NATHAN GABRIEL, KATHERINE PESKE, LARA PUDWELL, AND SAMUEL TAY

Dec 2011

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