

Samuel Chong Tay

SOFTWARE DEVELOPER

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Summary

Skillful problem solver with a background in pure mathematics and a passion for functional programming. 4+ years experience in web development, backend/infrastructure, and devops. Proven ability to quickly ramp up on new languages/technologies. Efficiency nerd who loves Linux, vim, and xmonad, and enjoys customizing the development environment.

Experience

Software Developer

Aug 2017 - Present

WRINKL

Remote, U.S.

- 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

Apr 2017 - Aug 2017

EXPANDSHARE

Charleston, SC

- Built core features and microservices for a Learning Manage System.
- Languages: Python, Javascript.

Applications Engineer

May 2014 - Feb 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.
- Promoted from Apprentice to Senior within two years for exemplary work quality.
- Languages: PHP, Javascript, Bash, Haskell.

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.

Skills

Development

- Agile experience in both scrum and kanban, along with Jira, Pivotal, Workfront, and ZenHub.
- Experience leading an agile team and mentoring junior developers.
- Experience with direct client interactions and discussing complex technological details with nontechnical stakeholders.

Languages

- Fluent in Haskell, Python, PHP, Javascript.
- Experience with Bash, C, C++.

Software

- Frameworks: Snap, Reflex-Platform, Express, Django, Magento, Zend.
- Databases: Postgres, MySQL.
- Devops: Docker, Vagrant, Ansible, RabbitMQ.

Workflow

- Proficient in Linux and MacOS.
- Enjoy maximizing productivity with development tools such as git, vim, tmux, xmonad, and zsh.

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>