

# JAMES CHUONG

SOFTWARE ENGINEER



## EXPERIENCES

Present  
|  
Mar  
2016

### Senior Member of Technical Staff | Platform Engineer

Instart

📍 Palo Alto, CA. USA

- Implemented Netflix Lemur for DevOps and technical support to manage and automate key material handling for the Instart CDN service
- Developed C++ library for integration with Vault with internal key management system
- Created tooling and scripts for managing operations hardware: switches, servers, databases
- Integrated Hashicorp services: Vault, Nomad and Consul to projects such as Jenkins; enabling secure, automated deployments with infrastructure as code

Mar  
2016  
|  
May  
2015

### Part-Time Contractor

Instart

📍 Remote

- Continued maintaining automated browser testing and visualization software

Apr  
2015  
|  
Sept  
2014

### Software Developer - Internship

Instart

📍 Palo Alto, CA. USA

- Created proof of concept of automating Safari and Mobile Safari browser tests with Selenium and ios-webkit-debug-proxy on real devices
- Developed QA infrastructure and visualizations for automated browser tests ProntoX
- Created full stack visualization, leveraging ProntoX to measure performance of Instart features and monitoring for performance regressions between releases

May  
2013  
|  
Aug  
2013

### Software Developer - Internship

EVault (now Carbonite)

📍 Oakville, ON. Canada

- Developed features for volume image based backups and restores for Windows servers with C++

Dec  
2012  
|  
Sept  
2012

### Software Designer - Internship

Blue Coat Systems, Inc.

📍 Waterloo, ON. Canada

- Developed features and bug fixes for the ProxySG network appliance in C++ and Java

Apr  
2012  
|  
Jan  
2012

### Instructional Assistant - Internship

University of Waterloo

📍 Waterloo, ON. Canada

- Tutored the object-oriented C++ programming course for computer science majors



## SELECTED PROJECTS

2018  
|  
2017

### Lemur - Certificate and Private Key Management

Instart @ <https://github.com/Netflix/Lemur>

- Certificate and key management, used to automate generation and deployment key material to serve customer traffic
- Streamlining key handling processes, and opens possibility for customer self-service
- Improved Lemur with asynchronous certificate signing and integrating with Instart services
- Integrated with Vault to further secure and distribute Lemur configuration secrets
- Tech stack is nginx, AngularJS, Python, PostgreSQL

2016  
|  
2014

### ProntoX - Test Automation and Visualization

Instart

- Full stack development done to leverage WebpageTest to collect performance metrics for product testing
- Python and Java backends, with Jinja and AngularJS frontends, Redis and PostgreSQL database
- Infrastructure running on AWS EC2, with automated scaling done with CloudFormation
- Used by sales, engineering and data science teams to gather data on our services, find potential customers and explore avenues for future development
- Papers written using ProntoX and WPT:
  - Deferrability Analysis for JavaScript
  - Perceived Performance of Webpages In the Wild

## CONTACT INFO

🌐 [jchuong.github.io](https://jchuong.github.io)  
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## SKILLS

Python  
Java  
Groovy  
C++  
SQL  
Puppet



## EDUCATION

2016  
|  
2010

### Bachelor of Computer Science

University of Waterloo

📍 Waterloo, ON. Canada

Honours Computer Science, Co-operative Program