Peter Jia-Chun **Li**

SOFTWARE ENGINEER WITH A FOCUS IN SYSTEMS SECURITY

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Education

Cornell University *Ithaca, NY*
MASTER OF ENGINEERING IN COMPUTER SCIENCE *Expected May 2019*

Cornell University *Ithaca, NY*
BACHELOR OF SCIENCE IN COMPUTER SCIENCE *Aug 2014 - May 2018*

- Graduate CS GPA: 4.08/4.0 | Undergraduate CS GPA (last 2 years): 3.76/4.0
- Honors: Dean's list (last 4 undergraduate semesters), Excellence in teaching (Operating Systems - Spring '17 & Spring '18)
- Selected Coursework: Language-based security, Network programming languages, Advanced programming languages, Systems security, Structure of information networks, Operating systems, Software engineering, Applied parallel computing, Practicum in AI, ML, NLP, Engineering communications

Skills

Programming & scripting	**Python**, **JavaScript**, C++, C, P4, Ocaml, Java, Swift, LaTeX
Web development & infrastructure	Vue.js, React.js, CircleCI, Node.js, Meteor, AWS S3 & Lambda, MongoDB
Technologies	P4 programmable networks, Elasticsearch, Git, pyopenssl, pyca/cryptography, *nix, NumPy

Experience

Akamai Technologies, Inc. *Cambridge, MA*
SOFTWARE ENGINEER INTERN - SYSCOMM SECURITY - KEY MANAGEMENT INFRASTRUCTURE *Jun 2018 - Aug 2018*

- Wrote a Python package that parses SSL certificates, GPG keys, SSH public keys into json using pyopenssl.
- Architected, implemented, unit tested, and deployed a distributed search tool in Elasticsearch that supports a flexible query language over json secrets via an internal web app (KMICC) built in Flask and Vue.js.
- Wrote a Python microservice that periodically updates Elasticsearch datastore by listening for changes in a data delivery channel and applying deltas.
- Committed, pushed, and documented for over 12,000 lines of Python and 2,500 lines of JavaScript.

Cornell University *Ithaca, NY*
GRADUATE TEACHING & RESEARCH SPECIALIST *Aug 2016 - present*

- Operating Systems (3 semesters as undergraduate, 2 as head), iOS Development (1 semester)
- Created and iterated on a gitpython package that manages Github for access-controlled and automated coursework delivery.
- Developed and graded coursework, tutored students in complex problem solving, and held weekly office hours.

SelfmadeMe, Inc. *New York, NY*
SOFTWARE ENGINEER INTERN - FULL-STACK WEB AND INFRASTRUCTURE *Jun 2017 - Aug 2017*

- Implemented in-house developer tools and integrated CircleCI continuous deploy to reduce engineering workflow overhead.
- Extended the Node.js REST API and Meteor/React app to support pipelined handling and delivery of video content to app users.
- Wrote, pushed, and re-factored over 6,000 lines of JavaScript (and JSX).

Roomi, Inc. *New York, NY*
SOFTWARE ENGINEER INTERN - iOS FULL-STACK *Jun 2016 - Aug 2016*

- Wrote, re-factored, and tested over 5,000 lines of Objective-C, deployed to an iOS app with over 300,000 daily active users.
- AB-tested experimental features using integrated business and technical analytics tools such as Localytics, Taplytics, and Appsee.

Selected project

Determining topic homogeneity in online sub-communities *Cornell University*
LEAD AUTHOR AND RESEARCHER *May 2018*

- Studied topic closeness of Reddit sub-communities and proposed an empirical index of closeness by measuring connectivity and spread in various network models created using LDA topic discovery and k-NN edge creation criterion in cosine-distance space.
- Built upon works like Cheeger's Inequality, node expansion, aimed for a better understanding of the emergence of social networks.

Leadership

2017	**Director of corporate relations**, ACM Cornell chapter (Association of Computer Science Undergraduates)	*Ithaca, NY*
2017	**VP operations**, Cornell University Chinese Students Association	*Ithaca, NY*
2016	**Event planning chair**, Cornell University Chinese Students Association	*Ithaca, NY*