Kevin Peng

2A Software Engineering Student at University of Waterloo
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Developer, entrepreneur & learner; excited to tackle interesting problems and learn something new.

PROFESSIONAL EXPERIENCE

SHOPIFY PRODUCTION ENGINEERING INTERN
Ottawa ON | Summer 2016

- **Internal Tooling:** developed a ruby and bash command-line tool that constructs development environments and manages file systems; the project was titled *dev*
- architected a package management system, to support extensions and configurations for *dev*
- prepared *dev* to be open sourced by utilizing the package system to factor out Shopify specifics
- **Developer Infrastructure:** built an NGINX reverse proxy that caches dependencies, which optimizes *bundle install* to be 7% faster and mitigates the impact of upstream outages
- deployed on EC2, using Chef

FOUNDER AND FULL STACK WEB DEVELOPER AT PETRO RECRUIT
Calgary AB / Waterloo ON | Summer 2015-Present

- built Ruby on Rails application (petrorecruit.ca), for aggregating & classifying job postings
- created automated scrapers and performed network analysis with Wireshark and TCP/IP
- architected system infrastructure, including Elasticsearch, SQL database & background jobs
- implemented a naïve bayesian classifier to categorize job postings
- raised $40,000+ in funding; aggregated 3000+ job postings; registered 2000+ users

DATA ENGINEERING INTERN AT WATERLOO VELOCITY GARAGE
Waterloo ON | Summer 2014

- created a data processing tool used to aggregate and sanitize millions of data entries from csv
- automated Django model generation based on incoming data
- wrote a parser in python that processes data for graphing and visualization using D3.js
- published article on velocity blog, (follow redirect: kpeng.ca/velocity)

SELECTED PROJECTS
All project source code available on GitHub (@kevintpeng)

- **Web Crawler & Scraper**: Ruby tool, recursively searches web pages, extracts data with regex
- **Paxos Video**: Javascript app aimed to achieve multi-client video synchronization using web RTC and an implementation of Paxos algorithm; for exploration of consensus protocols
- **Site Builder**: uses git hooks to pre-compile static html from content defined using YAML, markdown, and embedded ruby. Converts files trees of markdown files to a website
- **Rubik's Cube Solver**: Java app, solves in 98 quarter turns on average
- **Learn Something Everyday:** Daily notes on topics of interest to expand breadth of knowledge

SELECTED DISTINCTIONS

- Canada-wide Science Fair Silver Medalist and Best in Category of Information
- 3x Gold Medalist at the Waterloo Science and Engineering Fair
- Eastern Canada Student Energy Conference Innovation Award
- Recipient of Community Volunteer Scholarship
- Recipient of Waterloo President's Scholarship (+95% High School Admissions Average)
- Winner of Waterloo Region Robotics Engineering Competition

RELEVANT SKILLS

- **Languages:** Ruby, C, C++, Java, Python, Go, Javascript, Bash, HTML, CSS
- **Technology:** Unix, Git, NGINX, Chef, SQL, Ruby on Rails, Mocha, AWS, Wireshark