

# Kevin Peng

2A Software Engineering Student at University of Waterloo  
kevin@kpeng.ca · kpeng.ca · github.com/kevintpeng

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## SKILLS

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

## PROFESSIONAL EXPERIENCE

### SHOPIFY PRODUCTION ENGINEERING INTERN

Ottawa ON | Summer 2016

- **Internal Tooling:** developed *dev*, a ruby and bash command-line tool that constructs development environments and manages file systems
- 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* times by 10% and mitigates the impact of upstream outages
- deployed reverse proxy caches using Chef to provision an EC2 node

### FOUNDER AND LEAD DEVELOPER OF PETRO RECRUIT

Calgary AB / Waterloo ON | Summer 2015-Present

- full stack web development with Ruby on Rails ([petrorecruit.ca](http://petrorecruit.ca))
- architected entire system infrastructure, including Elasticsearch cluster, SQL database, machine learning jobs and scraper 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 THE 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](http://kpeng.ca/velocity))

## SELECTED PROJECTS

All project source code available on GitHub ([kevintpeng](https://github.com/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
- **UW Overflow:** Ruby on Rails app, for crowd-sourced answers to practice problems
- **Rubik's Cube Solver:** Java app, solves in 98 quarter turns on average

## 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
- 3rd place at Waterloo Google Games
- Recipient of Community Volunteer Scholarship
- Recipient of Waterloo President's Scholarship (95+ High School Admissions)
- Winner of Waterloo Region Robotics Engineering Competition