

Stephen Vo Van

(416) 300-0863

stephenvovan@gmail.com

<http://stephenvovan.com>

<https://github.com/vovantics>

About Me

I'm mission-driven. I aim to use the skills I have to make a positive impact on humanity. I strive to be effective by making data-driven decisions and efficient by being pragmatic, automating everything that can be automated, and using the best tools for productivity. I'm a coder and a leader. When I code, I optimize for usability, scalability, security, performance, and maintainability. When I lead, I care about empowering people and employing the least amount needed of agile methodology to move cohesively as a team. When my teammates think of me, I hope they think of someone with integrity who is resourceful, dependable, a clear communicator, and also someone who enjoys the journey.

Skills

Languages

- Programming: TypeScript/JavaScript, Python, Java, C, C++
- Database: SQL
- HTML, CSS

Databases

- SQL: PostgreSQL, MySQL
- NoSQL: Redis, MongoDB

Message Queues

- RabbitMQ
- Amazon SQS

Work Experience

CTO · FRNT Financial <<https://www.frnt.io>> · Aug 31, 2018 - Jan 23, 2024

An institutional capital markets and advisory platform focused on digital assets.

- 1st S/W engineer hire; grew the tech team to 3 and was responsible for managing the technology infrastructure of the company.
- Prototyped a trading desk platform using a Slack chat-based UI and Firebase as the back-end REST API and DB to facilitate OTC trading of crypto and fiat.
- Enhanced the trading desk platform by adding a web browser UI for trading crypto derivatives using React.js and TradingView, replaced the back-end with a Node.js REST API and PostgreSQL DB, integrated Redis for caching, built an OAuth server for easy code and token exchange for authorized clients, and migrated the infrastructure to AWS.
- Built a market data dashboard with interactive charts displaying data intelligence sourced from various exchange APIs; time series data was stored in Elasticsearch DB.
- As a team, re-architected the back-end API using a microservices architecture and codebase from a multi-repo to a monorepo.

Product Engineer / Consultant · Greater Known
<<http://greaterknown.com>> · Nov 30, 2016 - Present

Software consulting and development.

- This Space Works <<https://thisspaceworks.com/>>: built and deployed an Airbnb-style booking platform for meeting rooms using Django, React.js, PostgreSQL, and AWS.
- Soundscape <<https://soundscape.io/>>: enhanced a music licensing platform built on PHP and MySQL.
- EGO <<http://rideego.com/>>: designed and built a ride-sharing universal native app using Node.js, PostgreSQL + PostGIS, Expo, React Native, and GCP; app was published in the iOS and Android store.

Co-Founder · Clearbanc <<http://clearbanc.com>> · Jul 31, 2015 - Nov 30, 2016

A bank for freelancers, independent contractors, and entrepreneurs.

- Ideated and iterated on a banking web app that helped Uber drivers get paid faster through repeated live product testing and development; the web app was built on Ruby on Rails, Ember.js, MySQL, and hosted on AWS.

Skills (Cont'd)

Frameworks

- Python: Django, Flask
- Node.js: Nest.js, Hapi.js, Express
- React.js: Next.js, Remix

DevOps

- Infrastructure Cloud Hosting: AWS, GCP, Heroku
- Containerization: Docker, Kubernetes
- CI/CD: GitHub Actions, Drone, CircleCI

Platforms

- Linux (Ubuntu, RHEL)
- OSX

Education

University of Waterloo • Aug 31, 2002 - Apr 30, 2006

Mathematics and Computer Science
Bachelor

Languages

English • *Native speaker*

References

Available upon request.

Work Experience (Cont'd)

Back-End Team Lead • Top Hat <<http://tophat.com>> • Apr 30, 2013 - Oct 30, 2014

A classroom engagement tool that makes learning fun and effective for students and professors.

- Developed and maintained RESTful JSON API endpoints using Django-Tastypie consumed by our web, iOS, and Android clients.
- Enhanced web & SMS user registration in a way that reduced friction and increased sign-up conversions using Django-Tastypie API and Backbone.js.
- Wrote a Python module that merges student accounts, answers, grades, subscriptions, and orders.
- Re-architected the front-end Backbone.js SPA with a layout manager, de-centralized routing, and route authorization.
- Implemented dozens of user experiences with a consistent & maintainable design language through the composition of reusable & scalable HTML/CSS UI components.
- Built real-time notifications, sentiment polls, and announcements that reach students and professors in their browser, inbox, and phone using AWS SES and Twilio.

CTO • TeamBuy.ca <<http://teambuy.ca>> • Mar 31, 2010 - Jan 30, 2013

A “group-buying” e-commerce platform that facilitates the buying and selling of deals.

- 1st S/W engineer hire; supervised recruitment, retention, and organization of all engineers and grew the tech department from 1 to 16.
- Built the first version of the platform that included a native CMS, MySQL, PayPal, ExactTarget, Salesforce, JobVite, Facebook Connect, and Google Analytics integration.
- Led the design and implementation of redesigning a responsive website using HTML5 Boilerplate, Modernizr, Twitter Bootstrap, and JQuery.
- Triaged critical bugs (e.g. data integrity, DOS attack, dog pile effect).
- Collaborated with the founders and CEO to develop use cases and specifications that describe the implementation of the company's services as a website, mobile website, and app.
- Collaborated with the marketing, sales, customer service, and copy departments to assess and recommend technologies that support company organizational needs.
- Communicated the company's technology strategy to investors, management, and partners.
- Established and supervised the Kanban & Scrum agile development framework.
- Ensured the company's internal technological processes and customer-facing services complied with web security standards and PCI.

Work Experience (Cont'd)

S/W Developer • Accenture / CIBC • Jun 30, 2009 - Oct 30, 2009

Risk Management

- Prototyped a Windows C++ console application that implemented the Least Square Monte Carlo methodology by Longstaff & Schwartz for options valuation.

Systems Integration Developer • Accenture / TD Bank • Dec 31, 2008 - Jun 29, 2009

Business Banking

- Maintained a business banking web application using J2EE, Spring, JSP, Oracle, and JavaScript.

Systems Engineer • Accenture / Morgan Stanley • Mar 31, 2006 - Dec 30, 2008

Worked on DataLink, a set of web applications and services that provide enterprise-wide market data to various divisions throughout the firm.

- Enhanced and fixed a Java SOAP service for a Portfolio Accounting system by eliminating all pricing discrepancies and improving processing time from 2 hours to 8 minutes.
- Developed a Java web application that provided historical pricing data (8000 hits from 471 unique users per day), instrument information (19000 hits from 1704 unique users per day), and foreign exchange data (97000 hits from 1052 unique users per day).
- Lead a testing team, built a test harness and automated all regression tests.
- As the client evangelist, wrote Perl CGI scripts to facilitate data discovery and maintained the wiki.
- Identified performance issues by developing a Java web application to monitor latency. Resolved client-facing support issues (Ex. application bugs, database failures, outages, power downs, maintenance on application dependencies) in a timely manner.
- Conceived a SDLC schedule that facilitated weekly releases and implemented throughout multiple teams.

S/W Developer (Intern) • TD Securities • Apr 30, 2004 - Aug 30, 2004

- Enhanced various UNIX shell scripts for a credit derivative system: data conversion, data inbound feed, ant build scripts, and added multithreading to existing algorithms.

Programmer (Intern) • Canadian Broadcasting Corporation • Aug 31, 2003 - Dec 30, 2003

- Designed a web application for provisioning TV and radio production resources using C#, .NET Framework, XML, and Oracle.