

GENG SNG

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EDUCATION

Duke University

B.S. IN COMPUTER SCIENCE & PHILOSOPHY

Durham, NC
May 2020

General Assembly (Bootcamp)

FULL-STACK WEB DEVELOPMENT IMMERSIVE

Singapore
Summer 2016

EMPLOYMENT

Full-Time Assistant Instructor

GENERAL ASSEMBLY, WEB DEVELOPMENT (<https://generalassemb.ly/education/web-development-immersive>)

Singapore
Summer 2017

- Taught React, Redux, Javascript ES6, Node, MongoDB and other web frameworks to 23 career-changing adults for 3 months.
- Guided students through 4 full-stack projects which led to direct hiring as junior developers / starting their own startup.
- Lead instructor for unit on Ruby, OOP, Ruby on Rails, creating modern MVC web applications and RESTful APIs the Rails way. Students successfully deployed full-stack Rails apps and React + Rails API apps that are in production.

Freelance Web Developer / Consultant

1 YEAR+ EXPERIENCE / 7 PROJECTS

Singapore
2016-Present

- Improved load time of website from 6s to < 2s on average by enabling HTTP/2, Webpack HMR, requestIdleCallback()
- Saved a small business >\$1000/mth by implementing serverless solution using Firebase to replace existing AWS container
- Experience working in teams for bigger contracts and leading teams of up to 4.

CEO / Co-founder of Kinla!

MOBILE APP TO SEARCH AND PRE-ORDER TAKEAWAY MEALS

Singapore
Spring 2013

- Led team of 3 to on-board 15 quick service meal restaurants and secure \$10,000 seed funding.

TECHNICAL EXPERIENCE

Projects

CROWD-SOURCED API FOR STARTUP INFO IN SINGAPORE

<https://github.com/snggeng/startups-sg-api>

- RESTful API of Singapore's startup scene (investors, startups, hackathons) using Node.js, Express.js, MongoDB
- TDD with Continuous Integration: 93.48% test coverage & 65 tests using Mocha & Chai
- API is in production and frontend client has 50-100 unique monthly visitors

PROTOSTAR

<https://snggeng.github.io/protoStar-Visualisation>

- Research & co-author on paper about optimizing large scale SQL queries on cluster network databases using graph algorithms and mapping graph objects into a database for constant time lookup. (read operation optimized by 70%)
- Mapping Java objects into MySQL using Hibernate ORM, JPA and returning database tuples as Java Objects using JDBC
- Data visualisation using D3.js and cytoscape.js

REACT REDUX DASHBOARD

<https://github.com/snggeng/react-redux-dashboard>

- Open-sourced a dashboard template I created and often use for client work
- Admin dashboard template built using React, Redux, Thunk and Axios for Frontend State Management
- Serverless deployment using Google Firebase but compatible with any relational / noSQL database of user's choice

Skills

- **Languages:** Javascript, Ruby, HTML5, CSS3 (**Proficient**) / Python, Java, SQL (**Familiar**)
- **Frameworks:** Ruby on Rails, Node, Express, React, React Native, Redux, Webpack, Immutable.js, WebSockets, jQuery
- **Version Control / Automated Testing:** Git, Mocha, Chai, Grunt, Rspec, JUnit, CodeShip, Travis CI, GitLab
- **Deployment / Database:** AWS S3/EC2, Nginx, Redis, Heroku, OpenSSL, Google Firebase, MySQL, PostgreSQL, MongoDB

OTHER EXPERIENCES

HackDuke

EDUCATION TEAM LEAD

Durham, NC
2016-Present

- Organized 12 workshops throughout the school year featuring student presenters, Duke Alumni, founders and software engineers around Durham to an estimated audience of 30 per workshop
- Co-organized Duke's annual hackathon HackDuke, encouraging students to hack for social good

Tech Talks / Hackathons

Durham, NC
2016-2017

8 TIME HACKATHON PARTICIPANT

- Mentor & Workshop Presenter for Ruby on Rails @ HackDuke 2016
- HackCooper: Messenger chatbot for booking appointments & dashboard
- PennApps XVI: React Native iOS App - automated reminders for friends
- Presented workshops on Ethereum, Progressive Web Apps, React, Redux, and other topics at various hackathons/events

<https://github.com/snggeng/trip-mapper-demo>

<https://github.com/jrschwarz/hackcooper2016>

<https://github.com/stevenyang9/Sleepover>