

# Jonathan Tseng

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Available: May 2020

## Education

Northeastern University, Boston, MA

September 2016 - May 2020

*Khoury College of Computer and Information Science*

Candidate for a Bachelor of Science in Information Science and Minor in Psychology

- Related Courses: Web Development, Networks and Distributed Systems, Software Development, Human-Computer Interaction, Object-Oriented Design, Computer Systems, Programming in C++, Algorithms and Data, Database Design
- Honors: GPA: 3.68/4.00, Dean's List

## Computer Knowledge and Skills

**Languages:** JavaScript (React.js, React Native), Java, Python

**Tools:** AWS, Docker, Git, Vim, Jenkins, JetBrains

**Methodologies:** Agile, Scrum, TDD, Extreme Programming

**Databases:** PostgreSQL, Redshift, DynamoDB, Redis, MongoDB, InfluxDB

**Other:** English (Fluent), Mandarin Chinese (Fluent)

## Work Experience

InsightSquared, Boston, MA

July 2019 - December 2019

*Software Engineer Co-op*

- Developed data visualization interfaces in React.js on company's business intelligence platform
- Built an automated onboarding process for new SaaS clients without engineering effort
- Increased visibility of background processes by incorporating InfluxDB and Grafana dashboards
- Created event-driven microservices triggered after ETL pipelines using Celery and RabbitMQ
- Implemented database locking in Python to prevent race conditions from concurrent API requests
- Revamped product interface by converting design mockups into UI components using Material-UI
- Refactored existing frontend codebases to utilize new React features including hooks and contexts

SmarterTravel - A TripAdvisor Company, Boston, MA

July 2018 - December 2018

*Software Engineer Co-op*

- Created web tools to help marketing analysts launch dynamic ads on partnered sites at scale
- Improved performance of internal websites by reducing HTTP requests and avoiding re-renders
- Developed analyst tools to help identify untouched target audiences and other metrics
- Experimented with migrating existing codebases to serverless technologies such as AWS Lambda
- Redesigned build and deploy processes to production server by integrating with Jenkins

## Projects

Scout - A Student-Led Design Studio

January 2019 - May 2019

*Full-Stack Developer*

- Developed a mobile application that helps patients monitor their children's asthma symptoms
- Prototyped a cross-platform mobile application in React Native and Redux
- Built a Python server using Flask and Orator for managing data models and relationships
- Worked with medical professionals to user-test prototypes and evaluate usability requirements
- Collaborated with designers in an agile environment to refine design mockups in Figma

**Scout - A Student-Led Design Studio**, Boston, MA

January 2019 - May 2019

Full-Stack Developer

- Cooperate with external clients to build projects from scratch throughout the school semester
- Develop and review other developer's code in both frontend and backend development
- Collaborate with designers to find a balance between UI/UX and technical feasibility

Operate under the agile development lifecycle, involving sprints, daily standups, and retrospects

**Industrial Technology Research Institute**, Hsinchu, Taiwan

May 2018 - June 2018

*Research Intern*

- Conducted ML research on 3D bounding boxes using Deep Neural Networks (DNN)
- Presented on behalf of research team current development around 3D car and ship detection
- Evaluated quality of training data by running existing DNN models (e.g. ResNet, YOLO, etc)
- Assisted in preliminary research on noisy text analysis using Natural Language Processing (NLP)