

Tianyang Ren

Computer Science Student Interested in Software Development

@ hello@tianyangren.com
📍 Cambridge, MA

Experiences

Software Engineer, InterSystems

📅 July 2021 – 📍 Cambridge, MA

Software Engineer Intern, Enel North America - Enel X

📅 Sept 2020 – Dec 2020 📍 Boston, MA

- Enhanced and developed client tier and middle tier functionality in Node.js, React, Webpack, and AWS (Lambdas, S3, and Cloudfront).
- Built internal tools with graphical user interface to help the team navigate through huge amounts of data generated by power plants and clients.
- Coordinated with QA to resolve defects. Authored, maintained tech specs.

Software Engineer Intern

ToothPrint, sponsored by Massachusetts Life Sciences Center

📅 Jun 2020 – Sept 2020 📍 Boston, MA

- Developed a React Native healthcare application which helps parents to select baby products scientifically.
- Reduced response time of backend Django Python API from 4.2s to 2.4s by using Cache and Multi-threading.
- Improved communication encryption in user side and server side to help protect sensitive patient data and meeting HIPAA compliance.

Projects

Neer

📅 Fall 2019

- A social platform for location-based image post and search, written in Go.
- Implemented front-end with React, integrated Elasticsearch Geo-index feature to handle location-based search.
- Designed token-based authentication (JWTs) to protect service endpoints.

J-Rails

📅 Fall 2019

- A MVC web framework written in Java based on the idea of Ruby on Rails.
- Designed with annotation to enhance the model creation experience, used reflection to invoke methods to create HTML elements.

Multi-threaded Regex Matcher

📅 Fall 2019

- A parallel regex matcher that runs faster than the Java build-in library.
- Matcher convert regex to NFA to simulate result and convert a portion of NFA to DFA at runtime for better memory usage.

Kid-Fun

📅 Fall 2019

- A kid-friendly places finder for parents using Angular written in Typescript.
- Adopted RESTful API, used Ajax to display top reviewed places, and utilized Passport.js to handle user authentication.

Education

M.S. Computer Science

Tufts University - MA, United States

📅 Sept 3, 2019 – Expected May 14, 2021

B.E. Mechanical Engineering

Hangzhou Dianzi University - China

📅 Sept 12, 2015 – Jun 20, 2019

Skills

Languages

Java Golang Python
modern JavaScript TypeScript
C++ HTML CSS

Technologies

Git Shell Script HTTP
NodeJS React React Native
Angular2 MySQL Docker
Kubernetes AWS

Courseworks

Data Structures
Operating Systems
Database Systems
Design & Analysis of Algorithms
Software Engineering
Cloud Computing & Debugging
Machine Learning
Software Development
Discrete Mathematics
Theory of Computation
Principles of Microcomputer
Single Chip Computer Technology