Dhruv Parthasarathy

Boston, MA | 412-450-7755 | parthasarathy.d@northeastern.edu | linkedin.com/in/parthasarathydhruv
leetcode.com/parthasarathydNU | github.com/parthasarathydNU

Education

Northeastern University, Boston, MA
Master of Science in Software Engineering Systems (GPA 3.8 / 4.0)   Expected August 2024
Object Oriented Design, Algorithms, Cloud Computing (AWS), Web Design and User Experience, Big Data Applications and Indexing

Technical Skills

Languages and Databases: JavaScript, TypeScript, HTML, CSS, Java, Bash Scripting, MongoDB, MySQL, Postgres, Firebase, Redis
Frameworks and Libraries: ThreeJS, D3, Kafka, Socket.io, NextJS, React, Redux, Angular, NodeJS, Flask, Jest, Camunda BPMN
Build Technologies: Git/Gitlab CI-CD**,** Docker, Webpack

Professional Experience

Running Tide – Verification Software, Portland, ME
Full Stack Developer – Co-op   May 2023 – December 2023
- Spearheaded the development of a **React-NextJS reusable component library**, yielding a **20% reduction in development time** across projects within a monorepo, while also enhancing code reusability and maintainability
- Implemented **test-driven development (TDD) practices**, achieving a notable milestone of **100% test coverage** for backend services. This resulted in a **15% decrease in post-deployment issues** and an overall improvement in system reliability
- Developed a reporting service using **NodeJS, PhantomJS** and **Handlebars** libraries to automate report generation, **reducing time by over 99%**, from 5 hours to less than 1 minute to create and schedule a report
- Successfully **migrated** the front-end of the application from **ReactJS** to **NextJS, React Query** and **TypeScript**, resulting in a **reduction in development and deployment time by 30%**, while achieving enhanced performance and maintainability
- Created a map-based device tracking **visualization** using **MapboxJS**, to aid with **real-time monitoring** and geospatial analysis of **IoT devices deployed in the ocean**

Northeastern University – Combine Labs, Boston, MA
Full Stack Developer – Part Time   September 2022 – May 2023
- Developed three **Python – Flask-based web applications** with accessibility features and responsive User Interface, which resulted in a **5% increase in user interaction rate** - monaminkara.com, minkaracombinelab.com, planestrainsandcanes.com
- Migrated the websites to GCP **reducing downtime to 0.3%**
- Developed **CI/CD pipelines** to automate version updates resulting in a **70% reduction in time to deploy code**

Mu Sigma – Innovation & Development Labs, Bengaluru, India
Full Stack Developer – Full Time   August 2018 – August 2022
- **Led a 4-member team** to deliver a **Java based BPMN desktop tool** to create and execute analytical workflows
- **Spearheaded org-wide training** for 100+ team leads to increase the tool's adoption and usage across departments by 20%
- Developed a **React**-based CPG product launch simulation app called Real Games, supplying valuable consumer insights to stakeholders through **interactive maps (Mapbox API)** and visual representation
- Led the design and development of the Front-end of a **real-time pair trading Angular web application**
- **Optimized client-side code:** CPU Usage by 10%, Memory Footprint by 62% and App Load Time by 23%
- Implemented **D3 and Three.js** based components to the app, enhancing its functionality and user experience, resulting in 10% increase in user interaction rate

Leadership and Community Involvement

Mentor – Oasis, Northeastern University   September 2022 – Present
- Worked with 50+ undergraduate students to build software applications, develop their technical and networking skills through workshops, events, and industry connections
- Guide and support in software development best practices, project management, and team collaboration

Speaker – Northeastern University
- Conducted workshops on Front End Development at Northeastern University to help students gain practical knowledge and hands-on experience with the latest tools and techniques in the field