## **RUTUJA GHOGARE**

Boston, MA • +1 (857) 352-7318 • rutujaghogare1805@gmail.com • LinkedIn • GitHub • Portfolio

#### **EDUCATION**

NORTHEASTERN UNIVERSITY Boston, USA

Master of Science in Information Systems

Relevant Courses: Application Engineering and Development, DMDD, UI/UX Design, Web Design, Data Structures and Algorithms

Jan 2022 - May 2024

Bachelor of Engineering in Computer Engineering

Pune, India Aug 2018 – Sep 2021

Relevant Courses: Object Oriented Programming, Web Development, Software Engineering, Advanced Data Structures

#### **WORK EXPERIENCE**

UNIVERSITY OF PUNE

IPSERLAB LLC

Software Engineer Intern

Mountain View, CA

Sep 2023 – Dec 2023

- Developed a scalable quiz generation application using the **PERN** stack (PostgreSQL, Express, React, Node.js) for a user base of over 10,000, achieving an 80% user engagement and a 40% boost in daily users by delivering personalized quiz results and easy sharing options
- Engineered dynamic quiz dashboards with React hooks and GraphQL, reducing data transaction times by 60% through optimized data fetching strategies
- Created Java-based backend APIs using the JavaBandung library, slashing development time by 45% with reusable React components for new quiz summaries
- Collaborated with designers in Figma to create interactive prototypes, streamlining design-to-development transitions and reducing iteration cycles by 30%
- Upgraded UX and system resilience by optimizing Tomcat servers, reducing downtime by 60% and enhancing fault tolerance

HEFSHINE SOFTWARES

Pune, India
Full Stack Developer

Jun 2020 – Dec 2021

- Engineered a finance web app using Python and React.js, scaling to accommodate 60,000+ users by enhancing UX and ensuring robust application scalability
- Reduced API response time by 40% using Node.js with optimized use of Express.js middleware, significantly improving system responsiveness
- Achieved 30% scalability and reduced costs by 25% through **AWS EC2** auto-scaling and optimized cloud resource management. Implemented auto-scaling based on metrics like CPU utilization to dynamically adjust server capacity, refining scalability and cost efficiency
- Lowered MySQL query times by 25% through schema optimization techniques like indexing and query restructuring, boosting data retrieval efficiency by 25%
- Automated wealth management processes using Python and **Django**, integrated **React.js** for frontend development, achieving a 72% data processing and advanced service delivery efficiency

PERENNIAL SYSTEMS
Pune, India
Software Engineer
Mar 2019 – Dec 2019

- Developed an e-commerce platform for online grocery shopping using JavaScript and CSS for front-end development, Node.js for backend implementation, and MongoDB for data management, enabling comprehensive online shopping functionalities
- Streamlined product listings and checkout processes with Google Analytics, increasing monthly visitors to 50,000 through enhanced visibility
- Collaborated with the **UX design** team to create wireframes in Figma, developing intuitive interfaces that elevated user interaction by 30% and design quality
- Improved testing proficiency using Azure for automated testing, Jira for issue tracking, achieving 40% higher quality assurance standards
- Actively participated in a React workshop, integrating **carousels** and filters to enhance product browsing and selection interfaces, which resulted in a 30% increase in user interaction through increased navigation and content accessibility

# LEADERSHIP EXPERIENCE

## **Instructional Assistant at Northeastern University**

Sept 2022 - Apr 2024

 Demonstrated strong problem-solving skills by ensuring seamless delivery of instructional materials for 10+ professors during university lectures, achieving a 95% issue resolution rate

### **Hackathon Organizer and Team Lead**

Jan 2021 - July 2021

• Coordinated with professors and led a team of 6 during the InnovateX inter-college hackathon organized by the University of Pune, focusing on developing a cancer detection application using Python, JavaScript, and advanced image processing techniques, overseeing event logistics to ensure seamless execution

# **ACADEMIC PROJECTS**

# Image Generation App | GitHub

• Created a **MERN** app for high-resolution image generation inspired by OpenAI's DALL-E, using OpenAI's API, efficiently storing over 1000 images on **Cloudinary**, and boosting user engagement with community-sharing features, **downloads**, and prompt-based image search functionalities

## **Spotify Clone | GitHub**

• Built a Spotify Clone using **Next.js**, React, **TailwindCSS**, **Supabase**, PostgreSQL, and **Stripe**, integrating 10+ key features while enhancing UX with Stripe integration for 100+ subscriptions, client-side validation, error handling, and streamlining 20+ API routes

### Trader Joe's | GitHuk

- Implemented a Trader Joe's web app using MongoDB, Express, React, NodeJs, optimized with Redux for state management and REST API
- Achieved 15% faster page load times and 70% quicker data handling, with seamless PayPal Express Checkout API integration for payments

# Health Insurance Management System | GitHub

• Devised a Health Insurance Management System via Oracle PL/SQL & MySQL Workbench, focusing on CRUD operations which reduced data processing times by 30%, improved insurance data accessibility by 50%, and optimized patient history and bills processing by 65%

### Health Plus Services | GitHuk

• Constructed a **Java** app with **DBO4** database, enabling seamless patient-hospital interaction, establishing **50+** healthcare services in the Hospital Management System, and enhancing security through API functionality for email verification

### Publications | Paper

• Published a paper in **IJSREM** on an Android app for lawyer-client communication, implementing document encryption (85% security) and integrating live chat with MySQL for efficient data management

### **SKILLS & CERTIFICATIONS**

Languages: Python, Java, JavaScript (ES5/ES6), TypeScript, C, C++, HTML, CSS, JSON, XML

Databases: MySQL, PL/SQL, MS-SQL, MongoDB, PostgreSQL

Frameworks: Tailwind CSS, React.js, Node.js, Express.js, Next.js, Redux, Jupyter Notebook

Cloud/Tools: AWS (EC2, S3, CloudWatch), GCP, Git, Postman, Firebase, Selenium, Figma, REST APIs, Android, Docker, Jira

**Certificates:** Python Data Structures, Google Cloud Core Infrastructure, Foundations of User Experience Design