Hoodad Farhad

Canada, ON / hoodad.farhad@gmail.com/ +1 (519) 820 9195 / $\underline{\text{LinkedIn}}$ / $\underline{\text{GitHub}}$ Full-Stack Developer

EDUCATION

MSc in Computer Science | University of Guelph, Guelph ON

Sep 2022 - Sep 2024

o Thesis: Human-Computer Interaction | GPA: 3.94/4.00

B.Sc. in Software Engineering | Azad University Central Tehran Branch, Tehran IR

Sep 2016 - Dec 2021

o **GPA:** 3.67/4.00

Relevant Courses: Mobile App Development (A+), Data Structures & Algorithms (A+), OOP (A+)

Honors: Top 3% of graduating class • 6x Dean's List recipient

MAJOR PROJECT

BudgetApp / Budgetapp.it.com / GitHub

2025

React • Node.js • Express • PostgreSQL • AWS (EC2, RDS, S3, CloudFront) • Passport.js • OAuth2

- **Developed and deployed a full-stack budgeting web application,** enabling users to track income and expenses across unlimited bank accounts, with full CRUD functionality and interactive data visualization. Achieved complete feature coverage of commercial budgeting tools.
- **Separated frontend and backend** by hosting the React application on AWS S3 and CloudFront, improving site performance (Time-to-Interactive reduced by **60%**) and decreasing backend server load by **45%**.
- **Implemented secure user authentication** using Google OAuth 2.0 and Passport.js, with encrypted session management and CORS policy enforcement across domains.
- **Built a responsive financial dashboard** featuring monthly comparisons, category-based breakdowns (via pie charts), and recent transaction logs, with backend API response times under **150ms**.
- **Designed and normalized a relational database schema** in PostgreSQL hosted on AWS RDS, ensuring referential integrity, optimized indexed queries, and support for **thousands** of user transactions.
- Deployed a scalable RESTful API server using Node.js + Express API server on AWS EC2, handling 18 distinct endpoints with structured logging, secure environment variable management, and over 99.9% uptime throughout launch.
- **Configured HTTPS and domain routing** using AWS Certificate Manager and NGINX, improving trust and reducing user drop-off after login page enhancements.
- Ensured cross-browser compatibility and mobile responsiveness, delivering a consistent experience across devices using responsive design best practices.

RELEVANT WORK EXPERIENCE

<u>Web Developer and XAI Researcher</u> / <u>Collaborative Systems Lab</u> / Guelph ON Sep 2022 - Dec 2024

- Built a React tool with live subtitle controls, boosting engagement by 45% in a study with 18 users.
- Integrated YouTube API and Node.js backend to support 3 experimental conditions, enabling statistically significant results in comprehension scores (p < .01).
- Troubleshot asynchronous processing and API integration issues across a multi-component architecture, improving system stability during user testing.
- **Contributed** to **accessible technology** design by enabling subtitle control features and comprehension tracking for diverse user groups.

Full-Stack Web Developer/ Segal Pardaz Sina

Jan 2019 – Sep 2020

- Partnered with cross-functional teams to develop a scalable enterprise-grade financial tracking web appusing React.js, Node.js, TypeScript, and Next.js, supporting over 1,000 monthly active users.
- Demonstrated a strong passion for learning by continuously improving my React and Node.js skills, resulting in a responsive, mobile-compatible UI with real-time updates—and a 45% increase in user engagement for the tool I built.
- **Collaborated** on backend database architecture and APIs, improving data retrieval speed by ~40% and supporting up to 10,000 transactions/day.

TRAINING & CERTIFICATES

AWS Cloud Practitioner (<u>expected</u>: 2025), Node.js Testing (2025), Full-Stack Dev Bootcamp (2025), Java SE (2020), Network+ (2018)