Vraj Rajpura

vrajrajpura.careers@gmail.com | +1 (206) 861 2693 | Seattle, WA | Linkedin | Github | Portfolio | Design

EDUCATION

Master of Science - Information Management, *University of Washington* — 09.2024 – 05.2026, Seattle, USA
Software Engineering, Project Management, Data Science, Machine Learning, Product Management.

Bachelor of Technology - Computer Science and Engineering, GPA : 8.84/10, — 12.2020 – 05.2024, Surat, India
National Institute of Technology, Surat
Data Structures & Algorithms, Databases Management, Object-Oriented Programming/Design, Operating Systems, Computer Networking, Artificial Intelligence, Web Development.

WORK EXPERIENCE

Musafir.com, *Software Developer Intern* ⬀ — 02.2024 – 06.2024, Dubai, UAE
- Enhanced expense tracking for clients & reduced processing times by 15% as a result of implementing client-specific requirements using **C#** and **.NET - MVC** architecture .
- Enabled 1500+ clients to monitor their trips and carbon emissions by **automating** a highly manual & repetitive **report-generation process**.

Extrius group, *Software Developer* ⬀ — 01.2024 – 02.2024, Al Sharjah, UAE
- Developed **API routes** using **Flask (Python)** for the computation of customer rankings for a shopping app by enhancing requests and achieving response times under 50ms.
- Developed a secure, priority-based dashboard for retrieving health data from clinics for an insurance company using **HTML** (front-end), **Flask** (back-end), and **SQLite** (database design).

Emma Coach, *Developer and co-founder* — 01.2024 – 03.2024, Dubai, UAE
- Conceptualized an AI therapist completely on WhatsApp using **OpenAI's Assistants API**, **Replit hosting**, Flask and a multi-threaded architecture to enable 100+ simultaneous conversations and response times under 1.5 seconds.
- **Acquired 50+ customers** across three countries through a free trial, analyzed user behavior, and implemented user-requested features to enhance the product experience.

Barclays, *Software Intern (Business Analyst Level-4)* ⬀ — 05.2023 – 07.2023, Pune, India
- Automated a critical component in the Markets Technology division and financial systems using **Java & Maven**, and **basic Kafka**, saving 7 hours of the team weekly.
- Utilized agile **scrum SDLC** methodologies to build software components for proprietary systems using tools such as Jira, Office 365 and other software project management tools.

RESEARCH AND PROJECTS

Key Approval Software, *University of Washington, HFS* — 11.2024 – 02.2025
- Automated the key tracking process for 50+ stakeholders, reducing administrative overhead by 30% by developing a fullstack WebApp using **Google Apps Script**, **JavaScript**, and HTML.
- Deployed a production-ready key request system, by streamlining approvals, issuances, and returns reducing error rates by almost 70%.

Bitcoin price relationship to public sentiment, *Quantitative research* ⬀ — 06.2024 – 06.2024
- Analyzed Bitcoin price and public sentiment data over the past 365 days using quantitative finance techniques to calculate correlation.
- Performed sentiment analysis on all Bitcoin-related data to assign, positive, negative, and neutral sentiment to comments.

Gender/Racial Bias detection in LLMs for Real-estate, *Final project - Ethics in AI* — 09.2024 – 12.2024
- Conducted an in-depth analysis of how GPT-4o responded to 1000 prompts with varying gender & racial attributes using python & the OpenAI API.
- Designed & executed experiment followed by analyzing data to make inferences.

A Statistical Approach to Identifying Biased Comments Online, *Research Assistantship* — 03.2023 – 07.2023
- Assisted in data scraping and collection to train a Naive-Bayes classifier to identify discrimination against protected attributes online
- Researched ML fairness & safety while building & deploying advanced AI systems.

SKILLS

Programming Languages and Development: — C,C#,C++,Python,Java, HTML5, CSS, JavaScript, Flask, .NET, API Designing.

Database Management & OSs: — MySQL, Oracle SQL, MongoDB(beginner),SQLite, RDBMS,UNIX, Linux, Windows, MacOS.

Technical Skills: — Strong CS and data fundamentals, critical thinking, problem-solving, full stack development, Object-Oriented Design, Microservices, Testing, Natural Language Processing, Debugging, JSON, REST API, Software development, frontend, backend, Database querying, Cloud computing, Postman, GenAI chatbots & prompt engineering.

Additional: — Figma, WordPress, Git and Github, Office-365, Jira, Bitbucket, SourceTree, CI/CD, Deployment.