Manthan Desai

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SUMMARY

Software Engineer with over **3 years of experience** in **frontend and AI development**. Successfully engineered an engaging chat bot using **OpenAI's GPT-3.5 API** at Radical AI and **improved user activity by 40%**. **Designed efficient GUI components** and **core backend functionalities**, **enhancing system reliability and reducing message latency by 25%**. Experienced in **code optimization** and **seamless real-time feedback integration** aimed at **bolstering UI/UX for large-scale user bases.**

EDUCATION

University of Western Ontario
Bachelors of Science, Major in Computer Science | September 2021 - April 2025, London, ON
Relevant Coursework:
Data Structures and Algorithms | Databases | Artificial Intelligence | Operating Systems | Computer Architecture

WORK EXPERIENCE

Radical AI | *Python, OpenAI API, Node.js, React.js, MongoDB, Firebase*
Software Engineer Intern | June 2024 - Aug 2024, Remote, Canada
- Engineered an engaging and intuitive **frontend chat application** integrated with **cloud infrastructure**, connecting it with **OpenAI's GPT-3.5 API**. Enhanced user interaction and engagement, resulting in a **40% increase** in user activity on the platform.
- Designed and implemented **core backend functionalities** using **Node.js** and **MongoDB** for a chat bot, ensuring real-time communication within a **Linux environment**. **Improved system reliability by 30%** and **reduced message latency by 25%**.
- Contributed to the development of Kai, an **open-source AI Teaching Assistant**. Enabled streamlined instructional design and assessment management, which increased **educator efficiency by 50%.**

ScaleAI | *Python, C++, SQL, Javascript*
Software Engineer | February 2024 - Present, Remote, Canada
- Designed and implemented targeted test cases, achieving an **70% code coverage rate** for critical features which significantly contributed to **early detection of bugs** and **reducing potential future downtime.**
- Led **prompt engineering strategies** for **AI models**, using **JavaScript** and **API integration** to enhance **full-stack development** and achieving a **20% improvement** in project development efficiency.
- Authored **clear**, **concise**, and **human-readable documentation** for complex solutions involving **operating systems** and **data structures for AI models**.

TD Securities | *Microsoft Office, Jira, Java*
Business Systems Analyst Intern | May 2022 - August 2022, Toronto, ON
- Reported on Key Risk Indicators, visualizing current and emerging risk trends, and **monitored/managed 40+ assets.**
- Set up meetings to discuss application findings with technology asset owners to mitigate risk and develop over **50 effective risk remediation plans**.
- Co-led Scrum meetings to lead training for a group of **30 technology asset owners** on issue management process and risk remediation workflow.

PROJECTS

Anesthesia Pocket Guide | *Javascript, React.js, Node.js | November 2022 - March 2023*
- Built a **mobile application** that assists medical students understand key anesthesia concepts broken down with visuals and quizzes to test their knowledge.
- Incorporated **5 most used calculators by anesthetists** allowing for increased productivity at work
- Ran a study on **30 medical school students** and efficiency was increased by **15%** for day to day operations

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, C, C++, SQL, Typescript, HTML/CSS
Technologies/Frameworks: React.js, Node.js, Next.js, Linux, Git, Jira, Microsoft Office, Firebase, MongoDB, AWS, Tensorflow