Aniruddh Rao

✉ a36rao@uwaterloo.ca 📞 647-949-3401 in aniruddhrao03

Technical Skills

Languages: Python, C++, C#, XAML, HTML,CSS, JavaScript, TypeScript, SQL, Batch, PowerShell

Technologies/Frameworks: React.js, Angular.js, .NET Core, VMware, Pytest, Jenkins, Artifactory, Docker, Ansible, Grafana, Prometheus

Project Management: AGILE, SCRUM, Jira, Confluence, GitHub, GitLab

Professional Experience

Technical Program Manager   Jul 2023 – present
Wat.AI Student Design Team
- Orchestrated a multidisciplinary team comprising data scientists, AI engineers, and remote sensing experts, driving the conception, development, and deployment of a pioneering wildfire detection and monitoring system.
- Contributed to training AI models using Pythonic libraries like TensorFlow and PyTorch, enhancing project AI capabilities. Involving fine-tuning hyperparameters, preprocessing data, and optimizing model accuracy.
- Managed GCP infrastructure, ensuring scalability for large datasets, including setting up cloud-based data storage with GCP services and for diverse data sources such as satellite imagery, weather data, and historical wildfire data.

Site Reliability Engineer Intern   May 2023 – Aug 2023 | Toronto, ON
Royal Bank of Canada
- Implemented a streamlined automation pipeline using Tanium and Ansible Tower API to deploy applications across targeted servers. Resulting in a 40% reduction in deployment time.
- Designed Grafana dashboard for AIX servers utilizing PromQL queries to collect and visualize critical time series metrics such as CPU utilization, memory usage, disk I/O, and network traffic to monitor any issues that arose proactively.
- Implemented a robust CI/CD pipeline using Jenkins, Docker, and Kubernetes, resulting in a 50% decrease in post-release issues, and enhancing the development-to-production workflow within the mobile banking environment.

Automation Test Engineer Intern   Sep 2022 – Dec 2022 | Mississauga, ON
OpenText
- Automated 40 test cases for Carbonite Server Backup tool to decrease the toll on manual testing during regression. Increasing the reliability of tests by minimizing human errors.
- Designed test cases for Windows agent to create a volume image backup and restore when the change block driver is not installed. Used Batch and PowerShell to delete registry keys and files associated with the driver.
- Enhanced two framework commands using C# to handle backup or restore job failures. Incorporating parallel processing capabilities resulting in a 15% reduction in response time hang.

Software Developer Intern   Jan 2022 – Apr 2022 | Waterloo, ON
Bell and Howell
- Undertook a substantial UI redesign of Simulator applications using XAML, C#, and the .NET framework, elevating the user experience by integrating advanced legend controls into the dashboard's graphical user interface.
- Implemented an application tailored for Japanese vendors, facilitating the transformation of XML data into CSV format while incorporating robust encoding support for Japanese characters.
- Collaborated closely with end-users to understand their specific needs and preferences and effectively translated their input into tangible features and functionalities within the service machines, enhancing the overall usability and redesigning the user accessibility of the system.

Projects

Notes App, React.JS, JavaScript, HTML/CSS   Aug 2021 – Sep 2021
- Created a notes app using **React** with multiple features such as dark mode, adding notes, deleting notes, and searching notes.
- Used custom **React hooks** and handle search props to update the state of the search bar in the app.
- Designed with **CSS** to build a dark mode toggle and produce a clean and simple user interface.
- Employed **CSS grid** to make the app more responsive to user input.

Coronavirus Tracker, Python, Pyttsx3   Mar 2021 – Jun 2021
- Built a Coronavirus **web scraper** with a voice assistant in **Python** that tracks COVID-19 cases in real-time.
- Integrated libraries such as **RegEx speech Libraries** and Google speech recognition to analyze user input.
- Created text-to-speech feature using **pyttsx3** to produce an audible output from the user input data.

Education

University of Waterloo, Candidate for BASc Honors, Engineering   Waterloo, ON
Sep 2021 - July 2026