ARPIT ANIL

Technical Skills

Languages: C/C++, Python, Kotlin, C#, JavaScript, TypeScript, Bash, SQL, Java

Technologies/Frameworks: AWS(EC2, Redshift, S3, Glue, Bedrock), Flask, JavaFx, Bootstrap, Pytorch, Tensorflow,

Scikit-Learn, PyTesseract, Hugging Face, Git, Vue, Node.js, React, Docker

Certifications: Microsoft Azure Fundamentals, Microsoft Azure AI Fundamentals

Education

University of Waterloo

September 2020 - May 2025

Bachelor of Computer Science (Artificial Intelligence Specialization)

Waterloo, Canada

• Relevant Courses: Object-Oriented Software Development, Artificial Intelligence, Machine Learning, Application Development, Data Structures, Database Management, Algorithms

Experience

AI Engineer Intern

May 2024 – December 2024

Bespoke Metrics

Toronto, Canada

- Developed a robust PDF text extraction solution utilizing **PyTesseract**, integrating models through the **Amazon Bedrock** and **Hugging Face** on **AWS EC2**, achieving an accuracy rate of 80% for reliable data extraction.
- Built a PDF viewer with annotations using PDF.js Express, **Vue**, and **Node.js** in **Docker** containers, allowing for dynamic text recognition and streamlining the user experience for document analysis.
- Deployed large-scale LLMs locally and on the cloud, leveraging prompt engineering to integrate AI into the company platform, enhancing the scalability of model deployments and providing more flexible integrations.

Software Engineer Intern

September 2023 – December 2023

Ontario Ministry Of Health

Toronto, Canada

- Streamlined developers' workflow with custom **AWS Redshift** User-Defined Functions (**UDFs**), ensuring the efficient execution of over 75 pre-built scripts in both SAS and AWS environments.
- Engineered **Python** scripts for **AWS Glue**, designed to handle millions of data in (**ETL**) processes, ensuring efficient connections for smooth data transfer, reducing latency and improving overall system efficiency.
- Developed stored procedures in **PL/SQL** to systematically check and test the success of script files, providing a structured approach to quality assurance.

ML Engineer Intern

May 2022 - August 2022

Blue Lion Labs

Waterloo, Canada

- Optimized C++ codebase in a startup environment, skillfully implementing changes for enhanced customer satisfaction and seamless compatibility across multiple devices with scalable installations.
- Scripted in **Python** to compile a dataset of 500+ images from **AWS S3**, contributing to the efficient development of an ML model by incorporating the latest data for training and testing.
- Researched ML model inference on **Raspberry Pi** and **Jetson Nano**, identifying the Jetson Nano as a faster, more efficient solution for scalable deployment.

Software Developer Intern

May 2021 – August 2021

Petro-IT

Haryana, India

- Optimized web app with HTML, JavaScript, Textract AWS, and Flask for efficient connections between company
 portal, client interactions, and streamlined document processing of 1000+ files.
- Elevated a product's functionality with a 95% precise NLP Document Classification model using **Scikit** and **Tensorflow**, optimizing document storage for 25+ categories and simplifying user experience.
- Collaborated with team members using version control systems Git to organize modifications and share updates.

Projects

Mentorship Inclusivity Assistant | C#, Winform, Google Vision API, .NET WebRequest Class

VenusHacks 2021

- Developed the front-end part of the application using C# Winform within two days of the Competition.
- Implemented a local database system in **SQL** to store the mentor and mentee discussions.
- Indulged in pair programming with other team mates for improvising and connecting various parts of the application.
- Won the best use of Google Cloud Award.