

INDUSTRY EXPERIENCE

Software Engineer 2, AI	Microsoft Xbox - Gaming AI	Oct 2024 - Present
- Developed the Gaming Copilot, an artificial intelligence assistant for the Xbox App, which saw adoption by over 70% of users within a day of its release, demonstrating strong engagement and demand. - Built the Game Assist feature for the companion, providing instant in-game support, reducing player troubleshooting time by 30%. - Built the AI-powered Highlight Reels system for the Xbox ROG Ally X, enabling real-time detection and automatic capture of key gameplay moments.		
Software Engineer 2	Microsoft Xbox - Trust and Safety	Aug 2022 - Sept 2024
- Architected and deployed Small Language Models (SLM) to enable proactive content moderation, increasing detection accuracy by 65% across Xbox platforms. - Enhanced reactive moderation workflows, streamlining internal tools to boost efficiency by 18%, reducing human moderation workload. - Implemented proactive moderation strategies, mitigating spam and fraud threats by nearly 40%, safeguarding Xbox users.		
Software Engineer	Neurotrack Technologies Inc.	May 2021 - July 2022
- Engineered non-invasive cognitive tests leveraging AWS Microservices, improving early Alzheimer's and dementia detection accuracy, and identifying onset up to 3 years earlier than traditional methods. - Pioneered a coaching service to enhance cognitive health, resulting in a 15% improvement in client cognitive scores, positively impacting 100+ clients within the first 3 months. - Optimized backend infrastructure, improving scalability and reducing server response time by 25%, ensuring seamless user experiences.		
Research Engineer (Mitacs Accelerate)	Ethically Aligned AI	Mar 2021 – May 2021
- Analyzed literature across different domains in order to produce proof-of-concept for validating ethics in AI. - Iterated proof-of-concept upon feedback from a diverse class of businesses to identify specific business needs for building fair machine learning systems.		
Software Engineer	Famwork	Dec 2020 – May 2021
- Leveraged data science, visualization and statistics for integrating machine learning models into electronic health record systems and built a chatbot for the patient portal. - Spearheaded the automation of the telehealth system for the minimum viable product and improved accuracy of the system to forecast diseases the patient was susceptible to acquire, by 80%.		

EDUCATION/DEGREE

M.Sc. Computing Science, University of Alberta, Edmonton.	Sep 2019 - May 2021
B.E. in Computer Science, Anna University, Chennai, India	Aug 2015 - May 2019

SELECTED PROJECTS

- **Noise Eliminator in Active Learning (NEAL):** Algorithms to produce **highly accurate machine learning predictions** with a very **low amount of training instances**. Improved over **previous systems** by **30%**. **Python**.
- **Hybrid_UI - Intelligent User Interfaces:** An **intelligent system** to improve **user interface** experience on websites for **geriatric** and the **visually impaired population**. Performed **data analysis** and tested using **hypothesis testing (A/B testing)** and conducted **experiments** on a control population of **30 people**. **Python**
- **Expense Tracker:** **Web app** that parses **multi-bank statement PDFs** into **categorized spending insights** via custom parsers, an auto-categorization engine, and interactive dashboards. **Python, Streamlit, Supabase (Postgres), OAuth**.
- **Depression Detection using Linguistic Metadata:** A **machine learning** based system that detects the **early onset of depression** in individuals. Trained using a privatized **RSDD dataset**. **Python**.

SKILLS

Programming languages:	Python, C#, Java, C++, HTML, CSS, JavaScript, PHP, TypeScript, React
Libraries:	NumPy, Pandas, Matplotlib, Scikit-Learn, Keras, NLTK, Gensim, spaCy, TensorFlow, PyTorch
Databases:	SQL, Postgres, CosmosDB, DynamoDB, Redis
Programming Tools:	Jupyter Notebook, Google Colab, Github, Excel, Git
Platforms:	Microsoft Windows, Ubuntu Linux, macOS
Cloud :	Amazon AWS, Microsoft Azure
Tools:	Docker, Kubernetes, Redis, Cursor, Cline, Github Copilot
API:	REST, GraphQL, Websocket