# Andrew Daniel Singari





## Work Experience

#### Machine Learning Engineer

May 2023 - Present

Richmond, BC

SightSage Food and Nutrition Inc.

- Developed predictive models in **Python** and **R** using TensorFlow and Keras to analyze customer behavior and enhance e-commerce strategies.
- Developed an enterprise-level web application for real-time data analytics in e-commerce using ReactJS, NextJS, TypeScript, Tailwind CSS, Python, and AWS (Lambda, S3, RDS, EKS), incorporating microservices architecture, CI/CD pipelines with AWS CodePipeline.
- Developed and optimized machine learning algorithms in Python to enhance recommendation engines, resulting in a 15% increase in customer engagement. Utilized **SQL** for data extraction and management, and integrated solutions via **RESTful APIs** into existing web applications.

## Database Developer

August 2022 - February 2023

Coast Spas Manufacturing

Langley, BC

- Developed an AI-driven recommendation system utilizing machine learning models, such as collaborative filtering, using Python and MySQL, resulting in enhanced user personalization and increased customer engagement.
- Writing and optimizing complex **SQL** queries on server and **AWS Lambda** using data obtained from Syspro ERP application, integrated with an e-commerce website for automated entering of sales orders and invoices.
- Led the migration of the OAuth system, ensuring zero downtime and seamless integration using Python and **R**, while optimizing authentication workflows and enhancing security protocols.

Data Analyst June 2021 - June 2022

Worldlink Exports Remote

- Implementation of a scalable, cloud-based data processing and analytics platform, integrating machine learning algorithms for automated data preprocessing pipelines, reducing preprocessing time by over 30%.
- Created custom **Power BI** reports for clients, utilizing DAX queries on multiple tables. Reduced manual intervention by 25%, resulting in time saving and enhanced productivity.

## Projects

### Cognitive Games

Collaborated with a team. Games aimed at assisting dementia patients. Utilized MicroPython on an ESP-32 microcontroller to integrate hardware and software components seamlessly. Real-time data recording of players' performance was sent to a remote server using PHP and MySQL to record, visualize, and analyze performance data retrieved from database on the web application.

### EDUCATION

## Trinity Western University

British Columbia

GPA: 3.8

Bachelor of Science (B.Sc.) Computer Science

## SKILLS

Programming Languages Python, R, Java, C#, JavaScript, TypeScript, PHP, Node.js

Machine Learning Tools TensorFlow, PyTorch, Keras, Scikit-learn

Database MySQL, PostgreSQL, MongoDB, Oracle RDBMS, Redis, MS SQL Server Data Analytics Google Analytics, PowerBI, Tableau, Qlik, Microsoft Dynamics 365 CRM Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), Deep Learning

Generative Adversarial Networks (GANs)

Model Deployment Docker, Kubernetes, Microsoft Azure, Git, Jira, Confluence, ServiceNow