

DANIAL KHAN

Toronto, ON, Canada

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EDUCATION

University of Toronto

Sep 2020 - Apr 2025

BASc., Computer Engineering

WORK EXPERIENCE

Rocscience

May 2023 - Aug 2024

Software Developer

Toronto, Canada

- Tailoring to 10,000+ Rocscience Clients, acted as an integral part of the decision making and design phase with Stakeholders
- Spearheaded the development of a centralized data hub with complex integration, viability, quality assurance and sustainability of 19 Applications
- Designed and Implemented hub using gRPC with protobufs using ASP.NET, React, and PostgreSQL
- Created and wrote rigorous Unit Tests for the all Applications with a test coverage from 0 to 97%
- Conceptualized and created successfully additional Revenue for Rocscience of \$200,000+ with the implementation and sustainability support for Oracle Database in additional ASP.NET project
- Developed an Excel add-in with React, integrating API calls to the ASP.NET app for international customers

Rocscience

May 2022 - Aug 2022

Software Developer Intern

Toronto, Canada

- Designed and implemented 15% of new web version of RocPlane, their best-selling desktop application
- Developed a Django API gateway to facilitate seamless data transfer between React and MongoDB, improving data handling efficiency
- Optimized querying of data, improved modularity by 80% using methodology of test-driven development
- Planned and assisted in migrating the Django REST API to AWS cloud, enhancing scalability and reliability
- Created an alternate Django API with an Amazon DynamoDB local instance, providing a robust backup solution
- Integrated external service Auth0 to authenticate and authorize user management, enhancing security and user experience
- Developed an algorithm to create a tile view in a web application using JavaScript, React, and Redux, improving content organization and user interaction

PROJECTS

Codei

Sep 2024 - Present

- Trained and scaled a Llama 3 model from 25 to 70 parameters, creating an advanced code evaluator that enhanced code assessment accuracy and efficiency.
- Developed an AI-driven question generation system that automatically produces LeetCode-style coding questions and take-home assignments aligned with job roles and company context

Apparelo

May 2022 - Aug 2022

- Developed an open-source ML apparel type recognizer using AlexNet in a team of four
- Trained via Recurrent Convolutional Networks, AlexNet, GoogleNet, ResNet 50 implementations

RocSim

May 2022 - May 2022

- Architected a HoloLens software for visualizing Rock samples in a variety of environments including rain and debris simulation (C#, Unity, Visual Studio)
- Led a team of 4 and won a companywide hackathon in developing HoloLens application using C# and Unity

Delivr

Jan 2022 - Apr 2022

- Collaborated in a team of 3 to create a mapping application comparable to google maps
- Used C++ to implement Dijkstra's, and Greedy Heuristics with Glide UI
- Dynamically displays useful content for user at different zoom ratios using C++ STL library ezgl

SKILLS

- **Tools and Languages:** Python, JavaScript, TypeScript, C, C#, C++, Git, Django, .Net, gRPC, protobuf, ARM Instruction Set, React, Redux, MATLAB, HTML/CSS, Pytorch, TensorFlow, NumPy
- **Development Tools:** Agile Development, Waterfall Development, Git, DevOps, Auth0
- **Platforms:** Amazon DynamoDB, MongoDB, PostgreSQL, SQL Server, Linux