



## Personal Information

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




 [GitHub](#)

 [LinkedIn](#)

## Interests

- Machine Learning
- Full Stack Web Development
- Natural Language Processing
- Robotics
- Android App Development
- Game Development

## Highlights

-  Database Development
-  Android Development
-  Web Development
-  Software Engineering
-  Machine Learning
-  Natural Language Processing
-  Robot Operating System
-  Arduino

Determined, diligent and a graduate in Computing Science from University of Alberta. I am seeking an opportunity to use my hard work and technical skills to help create and innovate solutions for modern problems in the 21st century.

## University of Alberta – Academic Status

**Computing Science, BSc Specialization**

Completed December 2021

Grade Point Average (2020-2021)

3.0

## Computer Experience

**Programming Languages:** C, C++, Python, Java (Android), MySQL, RISC-V Assembly, C# (for Unity3D), HTML5, CSS3, JavaScript

**Other Software:** VS Code, LoggerPro, Microsoft and Google Suites, Linux, Robot Operating System (ROS), git, GitHub, Docker, Heroku, Django, Unity3D, Android Studio

**Hardware Applications:** Arduino

## Activities

### HackED 2020

January 2020

- Created a mobile **cross platform** app for android and iOS that enables users to incorporate image processing capabilities using **OCR** (Optical Character Recognition) and **object detection**. For OCR outputs the user is able to either open a link (if applicable), run a valid search query through google search or translate the text into a different language using Google translate API . We managed to obtain a trained model for object detection and also link the Firebase google cloud Tensor flow API to highly increase OCR accuracy.

Link: [Link To Project](#)

### NASA CSA Space Apps Challenge

October 2019

- Won **first prize** for the challenge SCISAT – **Canada's Atmospheric Chemistry Experiment** for being able to identify differences in gas concentrations and predict some atmospheric events in Arctic Region based on some satellite data.
- Designed an application to retrieve satellite data from an FTP server with Python and displayed all the analyzed data with multiple graphs on a webpage.

Link: [Link To Project](#)

### HackED 2019

January 2019

- Designed a web scraper application using Python and **Django** to retrieve information from yahoo finance website for any requested stock and display information on local server in a formatted way for easy data analysis.
- The main need for such an application was the discontinuation of yahoo finance API which made user analysis using years of data harder.

Link: [Link To Project](#)

## Languages Known

English

Hindi

French ( beginner )

## Other Skills

- UML
- Design Patterns
- OOP
- Data Structures
- Algorithms
- Makefiles
- SQLite
- Dynamic Programming
- Q-Learning
- SARSA
- Autoencoders
- Deep Neural Networks
- Bootstrap
- Android Studio
- ER Diagrams
- Decision Trees
- Convolutional Networks
- Heuristic Search
- Monte Carlo Tree Search
- AJAX
- FSM
- A\* Search
- Reinforcement Learning
- Regular Expressions
- N-Grams
- Naïve Bayes
- Sentiment Classification
- Context Free Grammars

## Projects

- **LinkedSpace** - A social media web platform which is interconnectible to other platforms using REST API. [Video Demo](#)
- **Mood Space** - A social media android app which focuses on moods.
- **ChatbotNLP** - Implementation of Chatbot using Intent Classification.
- **Quadris** - Tetris with modified rules.
- **PSDCA** - Face Mask Detection in live video feed.
- **Gomoku Players** - Implementation of Monte-Carlo Tree Search for the game of Gomoku.
- **ROS Navigation** - Navigation Stack for Summit XL robot.
- **RL Robotics** - TD Learning algorithms for Drone Parrot.
- **PETTHERBOT** - IRC twitch bot I created for fun. Deployed using Heroku.
- **TwoSentenceHorror-Dataset** - A dataset containing 23000 two sentence horror stories from the subreddit r/TwoSentenceHorror created using Pushshift-API.

## Research

- **Comparing “Surprisal” in Language Models** (Link to Paper)

## Certificates

- **The Web Developer Bootcamp 2021 – Udemy**
- **Code Foundation for ROS – TCS**
- **Deep Learning Essentials – IBM**
- **IBM Blockchain Essentials V2 - IBM**
- **Android Application Development**
- 5 day Leadership program by King’s College London

## Work Experience

### IT intern

(July 2018 – August 2018)

*Dover India Innovation Centre (Bengaluru, India)*

- Experience in Developing and Designing Dover India Intranet using MS SharePoint.

### Web Developer Intern

(July 2021 – August 2021)

*Astute Arrow SMART Digital Transformation (Remote)*

- Worked as front end developer of the website.
- Participated in team meetings and gathering requirements.