

**Personal Information** 

□ mparasha@ualberta.ca

**3** 7809198582

</>
✓/> GitHub

🔏 LinkedIn

### Interests

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

# Highlights

**Database Development** 



Android Development

(4)

Web Development

**≡**∷ s

Software Engineering

Machine Learning

...

Natural Language Processing



**Robot Operating System** 

Arduino

Name: Manu Parashar

Determined, diligent and a recent 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** 

December 2021

Grade Point Average (2020-2021)

3.0

Available for work Starting

January 2022

## 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 that enables users to incorporate image recognition capabilities. To be exact, that is OCR (Optical Character Recognition) and object detection. For both outputs the user is able to either open a link (if applicable) or run a valid search query. We managed to obtain a trained model for object detection for iOS and also link the Firebase google cloud Tensor flow API to highly increase OCR accuracy. Furthermore, for Android, I was able to implement text translation using Google translate API.

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**

- <u>LinkedSpace</u> 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.
- <u>ChatbotNLP</u> Implementation of Chatbot using Intent Classification.
- Quadris Tetris with modified rules.
- **PSDCA** Face Mask Detection in live video feed.
- <u>Gomoku Players</u> 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.
- **PETTHEBOT** IRC twitch bot I created for fun. Deployed using Heroku.
- <u>TwoSentenceHorror-Dataset</u> 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

- Completed 5 day Leadership program by King's College London
- The Web Developer Bootcamp 2021 Udemy
- Code Foundation for ROS TCS
- <u>Deep Learning Essentials IBM</u>
- IBM Blockchain Essentials V2 IBM
- Android Application Development

## **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.

Name: Manu Parashar