

ARUN KUMAR MARNDI

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Sydney, New South Wales, 2033

EDUCATION

University Of New South Wales

July 2018 - Present

Masters in Information Technology(Artificial Intelligence Specialization)

Department of Computer Science and Engineering

Sydney, New South Wales, Australia

KIIT University

2013-2017

Bachelors of Computer Science and Engineering

Department of Computer Science and Engineering

Bhubaneswar, India

RELEVANT PROJECTS

Poker Dice Simulator

Academic Project

February 2020-March 2020

- Wrote python code to implement Poker Dice that simulates the rolls of 5 dice
- Evaluate the probabilities of the various hands and return its results

Diff command internal working using python

Academic Project

March 2020 - April 2020

- Analysed the requirements of the project and referenced the research paper implementing the diff command
- Studied dynamic programming technique and implemented it using python
- Breaking down program into modules using object oriented programming techniques

Shrug(Shell-running-git)

Academic Project

June 2020 - July 2020

- Creating a subset of version controlling system called git
- Understanding the syntax and semantics of git commands
- Creating the git equivalent commands by writing its internal workings using Dash shell interpreter

Shell compiler

Academic Project

July 2020 - August 2020

- Wrote a compiler using Perl
- Takes shell file as input and generates the equivalent Perl script

Traffic Control System

Academic Project

October 2020 - November 2020

- Wrote assembly code for traffic systems simulation
- Implemented it on the ATMEGA2560 Microprocessor as a part of academic project

Temporal Planner

Academic Project

June 2021 - July 2021

- Created a Temporal Planner using python that schedules tasks with minimum cost

- Implemented constrained optimization problem to eliminate unwanted task times and A* search algorithm to reach the goal state
- Returned the schedule with optimal cost incurred

Text Classification of BBC news Articles

Academic Project

July 2021 - August 2021

- Preprocessing of BBC news articles.
- Used Bernoulli Naive Bayes and Multinomial Naive Bayes classification as per the requirement of the project to classify news into various categories.
- Applied user defined model (Logistic Regression) with an accuracy rate of 99%.
- Comparative analysis of all the models used on this project.

Japanese Character Recognition

Academic Project

October 2021

- Recognition of handwritten Hiragana symbols using Convolution Neural Networks.
- Improving the accuracy of recognition to 93% after modifying the convolution layer and its parameters.

Cat Breed Classification

Academic Project

October 2021 - November 2021

- Designed a neural network to classify various cat breeds from a set of images
- Improved model performance by hyper-parameter tuning
- Reached a testing accuracy of approximately 90% (top 1% of our cohort).

RELEVANT COURSES

Core Courses

Principles of Programming, Software Construction, Database Management System, Artificial Intelligence, Microprocessor and Interfacing

SKILLS AND INTERESTS

Programming Languages: C, C++, Python

Tools: LaTeX, Bash Shell Scripting

Web Development: HTML5, CSS3, Javascript

EXTRACURRICULAR ACTIVITIES

- Participated in various Model United Nations for at the national and international level
- Worked as a Social Activist at TPH (The Philanthropy Hand) Society during my undergraduate career.
- Worked as graphic designer to design stickers for cars at SAE INDIA KIIT during my undergraduate career.
- Member of UNSW Game Development Society
- Member of CSE Society at UNSW

AWARDS AND HONOURS

- Distinction in Neural Networks (COMP9444) and Computer Vision (COMP9517) during Master's degree.