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AISHIK PYNE

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EDUCATION

National University of Singapore

Singapore, SG

Aug 2022 - Dec 2023 (Expected)

- Master of Computing, Specialization in Artificial Intelligence: CGPA 4.83/5
- Thesis: Using LLMs to plan for household robotics tasks, advised by Prof. David Hsu.
- **Graduate Coursework:** Al Planning and Decision Making, Intelligent Robots, Reinforcement Learning, Trustworthy ML, Uncertainty Modelling in Al, Neural Networks and Deep Learning

Jadavpur University

Kolkata, India

Aug 2015 – May 2019

- Bachelor of Engineering, in Computer Science and Engineering: CGPA 8.3/10 (absolute scale). First Class Honors.
- **Graduate Coursework:** Object-Oriented-Programming, Data Structures and Algorithms, Graph Theory, Computer Architecture, Operating Systems, Linux Shell, DBMS (Relational Model), Networking, Compiler Design.

EMPLOYMENT

Software Engineer II

Microsoft, Hyderabad, India

July 2019 -- July 2022

- Azure Agriculture Data-Science Team (FarmBeats)
 - Segmented crops from satellite imagery using CNNs in an attempt to capture spatial information from remote sensors.
- Azure Blockchain Service (ABS)
 - Developed ABS Portal Extension to allow customers to Create and Manage ABS deployments from Azure Portal UI.
 - Developed Azure Compliant Resource Provider and background TaskExecutionEngine for the reliable asynchronous deployment of Hyperledger-Fabric managed clusters.
 - Designed and orchestrated safe deployment pipelines for global ABS service roll-out.
 - Maintained ABS and Azure Blockchain Workbench as a live-site front-liner to mitigate live customer issues.
 - Collaborated to deliver PrivatePreview I & II for ABS Hyperledger-Fabric.
- Financial Services Cloud
 - Architect-ed and implemented the web layer for Azure Commercial AI/ML Service to create a horizontal service to host ML models from all Azure Global verticals.
 - Implemented a token creation and management platform following the token taxonomy framework..

Co-founding Member & CTO

Datasutram, India

Aug 2018 - Apr 2019

- Founded a location-intelligence-based start-up to help suggest retail enterprises the best geo-locations to open or expand their offline shops.
- Developed a data-scraping tool in python to gather data, such as affluence, communal distribution, traffic density of an area. Used the data to develop a regression model to estimate the development index of the area.
- Tested the model by sampling an area's sales data and shop ratings and correlating it with the model output.
- Instilled a growth mindset and customer-first ideology in the company, which has led to the company's current valuation at ten million dollars.

Intern - Azure Agriculture Team

Microsoft, Hyderabad, India

May 2018 - July 2018

• Created meta-data index of multi-band satellite images from MODIS and Sentinel to enable geospatial queries and lazy processing and deployed it using Azure Data Factory

PROJECTS

Course Projects

National University Singapore

Spring 2023

- Self-Driving algorithm for Duckietown for CS5478: Intelligent Robots
 - Used imitation learning to learn self-driving using the car's front camera, by using a model-based Pure-Pursuit lane following controller as a teacher.
- Deceptive Poker for CS6284: Reinforcement Learning
 - Teaching agents to cheat via collaboration in a zero-sum competitive multi-agent setting like poker.

LANGUAGES AND TECHNOLOGIES

- Programming Languages: Python, C#, JS, TypeScript, C++, Java; Big Data Frameworks: Databricks, Spark, Azure Synapse
- ML Frameworks: Pytorch, Tensorflow, Keras, Azure ML, ROS, MLFlow
- Others: GRPC, Kubernetes, SQL, No-SQL, Azure Data lake, Vue, React, KnockoutJs, Scss, Webpack,