ADITYA RATHOD

Undergraduate Computer Science Student at The University of Texas at Dallas

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EDUCATION

The University of Texas at Dallas ***Aug. 2019–May 2023***

First-year, B.S. Computer Science, Collegium V Honors Program

Relevant Coursework: Discrete Math for Computing I, Computer Science II (C++), AP Computer Science (Java)

Student orgs: Association for Computing Machinery (ACM), Artificial Intelligence Society (AIS), Codeburners (competitive programming)

WORK/RESEARCH EXPERIENCE

Research Intern ***Aug. 2019 – Present***

Polycraft World, Center for Engineering Innovation, The University of Texas at Dallas

‣ Assisting in development of an AI training environment generation tool for researchers as part of lab's participation in DARPA's SAIL-ON initiative, utilizing Java and collaboration tools such as Github, Microsoft Teams, SharePoint, and Jira

Undergraduate Researcher ***Jun. 2019 – Aug. 2019***

Clark Summer Research Program @ The University of Texas at Dallas

‣ Learned machine learning and deep learning concepts, from data preprocessing to model creation
‣ Implemented Sequence-to-Sequence model for abstractive news summarization in Keras/TensorFlow
‣ Scraped news websites using Requests/BeautifulSoup to create a novel labeled dataset of 25,554 articles
‣ Presented research at symposium with university staff, department leaders, and faculty in attendance

Robotics/Programming Instructor ***Jul. 2017 – May 2019***

Impressive Minds Academy

‣ Instructed class of 12-14 students aged 8-13 in robotics, programming, and game development
‣ Taught the basics of LEGO EV3, introduced programming concepts through Scratch, Tynker, and Python

PROJECTS

Liform — Medical Bill Transparency (HackRice 9.0) *devpost.com/software/liform*

‣ Led team in building web application for patients to upload medical bills and hospitals to upload per-procedure average costs to allow potential patients to compare medical procedure costs across providers
‣ Built over 36 hours at a hackathon using ReactJS for frontend, NodeJS/Express/MongoDB for the backend

Mushroom Classification Decision Tree *github.com/applecrazy/mushroom-decision-tree*

‣ Implemented a multi-branched decision tree model from scratch using Python/NumPy
‣ Trained on the UCI Mushrooms Dataset, achieved 100% accuracy on the test set

Credit Card Fraud Detection *github.com/applecrazy/fraud-detection*

‣ Utilized Kaggle dataset of transaction attributes and fraud classification labels to develop neural network-based classification model using TensorFlow and Keras
‣ Achieved 99.94% test accuracy, with F_1 score of 0.81, learned how to deal with skewed data

FLEX *github.com/applecrazy/flexapp, flexapi*

‣ Developed/deployed Vue.js web app for high school office hours scheduling; 80 recurring users at peak
‣ Developed NodeJS + Express based REST API to interface with existing database

AWARDS

National Merit Scholar ***Spring 2019***

National Merit Scholarship Corporation

‣ One of 8,000 students nationwide awarded college-sponsored National Merit Scholarship based on exemplary academic performance