github.com/dhruv-sundar dhruv-sundar.github.io

DHRUV SUNDARARAMAN

(571-263-9176) dhruvs6@illinois.edu 2798 Miles Stone Dr. Vienna, VA 22181

EXPERIENCE

Software Engineering Intern

Chakrabarti Management Consultancy Inc

Jun-Aug 2021

- Utilized Spring Boot w/ Java to develop web-app to translate XML files to readable format
- Parsed through 1000+ lines of data from Customs and Border Protection
- Streamlined CMCI's data processing service

Natural Language Processing Research Intern Volgenau School of Engineering George Mason University Jun-Aug 2020

- Supported by Dr. Boicu Associate Director of Learning Agents Center to research language learning models
- Designed, trained, and tested nonlinear matrix transformation to improve upon existing technology
- Implemented algorithm in automated short answer scoring system

Computational Biology Research Intern School of Systems Biology George Mason University

Jun-Aug 2019

- Supported by Dr. Vaisman Professor of Bioinformatics and Computational Biology to research machine learning models
- Designed, trained, and tested a random forest classifier to detect geriatric depression from a psychological questionnaire
- Implemented computational diagnosis for affordability and accessibility

EDUCATION

Champaign, IL

University of Illinois at Urbana-Champaign

Anticipated May 2024

- B.S. in Computer Science + Linguistics
- Coursework: Data Structures, Numerical Methods, Discrete Structures, Calculus III, Introductory Matrix Theory

 PROJECTS

AlgoBot

Pandas, Numpy, Statsmodels, YFinance, Jupyter Notebook

- Built a Discord bot to simulate real-time trading and perform TD differential analysis, ARIMA forecasting
 CSGAN

 Pandas, Numpy, PyTorch, Jupyter Notebook
- Built a generative adversarial network to generate skins for weapons from Counter Strike: Global Offensive
 A Generalization of Compositional Matrix-Space Models of Language for Short Answer Scoring

 PyTorch
 - Tested a natural language model to automatically grade short essay questions, trained on 3 billion words

ACTIVITIES AND HONORS

Caesar Research Group, Undergraduate Research Assistant

Python, NodeJS

Developing software to assist researchers with networking and connecting through related interests

Mitra Research Group, Undergraduate Research Assistant

ROS, Python, C++

Researching verification and testing of autonomous driving systems

Juni Learning, Computer Science Instructor

C++, Python, Java

Teaching students computer science concepts ranging from OOP fundamentals to algorithmic problem solving

National Merit Finalist, Eagle Scout - Troop 1983, Presidential Volunteer Service Award(Gold)

Languages and Technologies

• C++, Java, Python, PyTorch, HTML, NodeJS