https://github.com/vineetred/ vineetreddy@live.com | +1 401-(808)-1931

EDUCATION

NORTHEASTERN UNIVERSITY

MS IN COMPUTER SCIENCE Dec 2022 | Boston, MA

ASHOKA UNIVERSITY

MAJOR IN COMPUTER SCIENCE

Minor in International Relations May 2020 | Sonepat, India GPA: 3.62/4.0 Cum Laude

SKILLS

PROGRAMMING

Proficient

- Python C++ Rust Golang
- •C •Git C# Shell Assembly Java
- MongoDB NLTK

LINKS

Github://vineetred LinkedIn://Vineet Reddy

TEAM EXPERIENCE

Resident Assistant - Ashoka University Teaching Assistant - Intro to Programming

COURSEWORK

Discrete Mathemtics
Probability and Statistics
Data Structures
Algorithms Design and Anaylsis
Operating Systems
Theory of Computation
Machine Learning
Programming Design and Implementation
Advanced Machine Learning
Data Mining
Computer Security and Privacy

Unstructured Information Processing

ACHIEVEMENTS

ACM - ICPC Asia Region Finalists Tata Crucible Quiz - Regional Finalists ACM - CCS Paper submitted OneVote - Vote Malapportionment Article

EXPERIENCE

EI VENTURES | SOFTWARE ENGINEER INTERN

Jan 2021 - Ongoing | Boston, MA

- Created DeFi Exchange aggregators that would store up to date transaction on Ethereum and Solana.
- RESTful endpoints were optimized to process upto 5000 transactions each second.
- Work was primarily on Rust, Python, DigitalOcean, and MySQL.

EACIIT VYASA | Software Development Engineer

July 2020 - Dec 2020 | Singapore, Singapore

- Worked on processing 180M+ records of financial big data to identify patterns of money laundering.
- Built a backend API and a data pipeline to perform quick entity resolution.
- Optimized code to ingest data in hours instead of days, reducing time by 62%.
- Tech stack included Golang, AWS, Hadoop, MongoDB, and Bash scripting.

LUCIDEUS | AI INTERN

May 2019 - August 2019 New Delhi, India

- Worked with malware forensics team to create a solution for zero-day exploits.
- Used Machine Learning to analyse system API calls. TensorFlow and CNTK were used. C++ and C# for the daemon. Deployed on GCP and Azure.
- The solution is expected to be combined with their Enterprise-grade security software, SAFE. The solution is also being made open-source.

PROJECTS

UNDERGRAD THESIS - FAKE NEWS ANALYSER Aug 19' - May 20'

- Advisors Dr. Debayan Gupta, MIT and Dr. Ravi Kothari, IBM Chief scientist. Created a multi-modal system that could detect fake images, audio or news.
- The model gave as output a trust rating that would form the basis of prediction. Employed LSTM based topic modelling methods to achieve very high accuracy.
- Deployed on Azure. Built on TensorFlow, Gensim and NLTK.

FLOWY - DYNAMIC WALLPAPER SHIFTER May 20' - Ongoing'

- Wrote a daemon that changes the wallpaper of a system based on lat-long.
- Created privacy preserving functions to calculate solar times very guickly.
- 2000+ active users were reached within 1 month of development.
- Project has grown to accommodate 6 other open source developers.
- Written in Rust to optimise performance and support several OSes.

C-GAN IMAGE TRANSLATION Jan 19' - May 19'

- Used Conditional Generative Adverserial Networks to implement domain transfer using labelled edges as input and obtaining a fully realistic output
- The same model was used for 5 different datasets (such as GMaps, Cityscapes, Day2Night) through Pandas and OpenCV, implemented using TensorFlow 2.0, Keras on Microsoft Azure instance, and simluated on GCP.

AADHAAR CYBERSECURITY REVIEW - ACM CCS Jan 19' - Ongoing

- A research paper based on the Aadhaar Biometric identification system
- The main aim of the paper was to provide succinct overview and the limitations of the system.
- Through the course of the paper, we ourselves have come up with solutions that could make the system better.