Rishi Papani

rspapani@outlook.com | {email me for my phone number!}

EDUCATION

UNIVERSITY OF MARYLAND
BS in Computer Science & Math
May 2024 | College Park, MD, USA
President's scholarship
Journalism scholarship
Current GPA: 3.76/4.0

THE INTERNATIONAL SCHOOL BANGALORE
Grad. July 2020| Bangalore, India

VARIOUS MONTGOMERY COUNTY PUBLIC SCHOOLS
Aug 2007 - Jun 2014| Germantown, MD

LINKS

Github:// rspapani
LinkedIn:// rspapani

SKILLS

PROGRAMMING
Python • Java • Scala • C/C++
Rust • TypeScript/JavaScript
MIPS Assembly• Haskell • Matlab

LIBRARIES
PyTorch • NumPy • Apache Spark
Django • OpenCV • Pandas
React • LangChain • LlamaIndex

MISCELLANEOUS
Public Speaking • Docker • PostgreSQL
LaTeX • GNU/Linux • AWS • Git
Functional Programming • RESTful APIs
MS Excel • Web Scraping

COURSEWORK

Upper Level Algorithms
Upper Level Data Structures
Computer Architecture
Cryptography
Linear Algebra
Multivariate Calculus
Natural Language Processing
Data Science Algorithms
Numerical Analysis
Probability Theory

ACTIVITIES
Systems Programming Teaching Assistant
Kappa Theta Pi - Professional Fraternity
English101 Teaching Assistant
Startup Shell Fellow

EXPERIENCE

TARGET | Software Engineering Intern
June 2023 – August 2023 | Remote, US

- Created the UI for a touchscreen register application with Typescript and React
- Developed a suite of modular React components that allows for rapid extension, maintenance, and testing of the UI
- Integrated modern UI/UX design principles to create fully featured yet intuitively simple screens
- Designed an efficient search strategy to filter through millions of DataRows
- Extended the functionality of RESTful backend using Kotlin and Micronaut using backend for frontend design to enable user oriented data searching

TARGET | Software Engineering Intern
June 2022 – August 2022 | Remote, US

- Used Apache Spark + Scala to create data pipelines that collected monitoring data on existing data pipelines/transforms, implemented on Hadoop clusters
- Engineered a reusable mechanism to automatically optimize HiveQL queries
- Optimized program to evaluate numerous queries across various datasets with 100s of millions of records
- Designed an extensible and easy to maintain pipeline + dashboard that was pushed to production and is currently in use by the team

TERRAPINS ONLY | Head of Backend
April 2022 – August 2022 | College Park, MD

- Led the development of and designed the server side functionality of TerrapinsOnly, a UMD exclusive social network
- Programmed the API in Python using Django and Django Rest Framework, and used PostgreSQL for the database, hosted on AWS EC2
- Designed an efficient probabilistic algorithm for user matching
- Designed and implemented user creation, authentication, and internal representations along with RESTful API endpoints

OPTIFOCAL DRIVE
May 2021 – August 2021

- Machine learning application to monitor if someone is paying attention using facial recognition and facial landmark detection models
- Utilizes statistical averaging, linear algebra, and trigonometry to calculate orientation and determine if they're paying attention
- Programmed in Python using NumPy, OpenCV, and Dlib, with the PnP algorithm, web demo runs on Flask, deployed on an AWS EC2 instance

CORNELIUS BEVERAGES | Software Engineering Intern
June 2019 – August 2019 | Bangalore, IN

- Enabled the automatic collection, trend analysis, and predictive monitoring of usage data on a smart beverage dispenser using Python and Numpy
- Synchronized the GUI menu with this data using PyQT and QML
- Led a team of Interns to implement the data receiving on a Smart Module for pre-existing Food Heating Unit, done for sister company, Prince Castle.
- Permitted the automatic updating of a local ARM chip using a program to receive from an MQTT service, and write it to an ARM controller using Python and the PySerial Library.