ABHISHEK BABU

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Inquisitive and enthusiastic computer science student with strong foundation in math and programming logic. Highly interested in leveraging my skills in data science and machine learning fields.

EXPERIENCE

Software Engineering Intern
Pārv.ai

📅 June 2020 – Present   📍 Redmond, WA

– Pārv.ai is an AI-based educational platform interacting with various MOOC providers including Udemy and edX
– Developing web content using Azure SQL, React.js, HTML and CSS
– Enabling single sign-on with Google, Facebook & Azure Active Directory

CodeLabs Intern
CodeDay

📅 July 2020 – August 2020   📍 Remote

– Building a resume classification platform using Node.js, Express.js, Keras and TensorFlow for Python based on potential matching job categories
– Implemented data cleaning and processing using Natural Language Toolkit (NLTK) and regular expression filtration techniques
– Used tokenization and padded sequencing to encode data
– Developed a neural network with softmax activation to generate probability distributions for resume classifications
– Deployed the data processing pipeline and neural network on the web server to allows users to classify their resumes

Software Engineering Intern
Tata Consultancy Services

📅 August 2019 – September 2019   📍 Bellevue, WA

– **Project:** Meetings Monitor
– Developed a .NET Core cross platform application with C# for a Raspberry Pi 4 to snapshot a conference room at regular intervals
– Leveraged Azure Cognitive Services for human detection and facial recognition analysis on conference room snapshots
– Used Azure Table Storage and Blob Storage for time-stamped storage of snapshots and analysis results
– Implemented offline human detection with OpenCV HaarCascade classifiers to optimize API calls, reducing application cost by 90%
– Created and updated documentation for project dependencies and development on Azure DevOps

PROJECTS

Breath of Hope - Anthropometry
📅 August 2020 – Present

– Breath of Hope is a volunteer organization contributing to the effort of mitigating COVID-19 effects in India
– A web application that allows doctors to extract physical information (height, etc.) from pictures of patients (pregnant women & children)
– Leveraging Node.js & Express.js for web application server and TensorFlow.js (BodyPix) & OpenCV (ArUco markers) for image analysis

SpotiViz
📅 July 2020 – Present

– A web application for users to visualize their Spotify listening data
– Leveraging Python, Flask and the Spotify Web API for user authentication and data collection, and Dash for data visualization

EDUCATION

B.S. in Computer Science
University of Washington, Seattle

📅 September 2018 – June 2021

– Admit to the Combined B.S./M.S. program starting graduate studies in Fall 2021
– Recipient of Microsoft Endowed Scholarship
– Minor in Mathematics
– **GPA:** 3.98/4.00
– **Relevant Coursework:**
  • Systems Programming
  • Data Management and Databases
  • Data Structures and Parallelism
  • Software Design and Implementation
  • The Hardware/Software Interface
  • Discrete Mathematics and Probability
  • Linear Algebra and Analysis
  • Differential Equations
  • Engineering Statics and Dynamics
  • Scientific Computing
– **Upcoming Coursework (Fall 2020):**
  • Machine Learning
  • Data Visualization

SKILLS

Languages

Java   Python   C++   C#   C
MATLAB   JavaScript

Databases

SQL   SQLite   SQL++   Cypher QL
Azure SQL   neo4j   AsterixDB

Data Science & Visualization

scikit-learn   D3.js   OpenCV
Azure Cognitive Services   Seaborn
NLTK   Matplotlib   TensorFlow
Keras   NumPy   Dash

Web Development

HTML   CSS   React.js   Express.js
Chrome Extension API   Node.js   Pug
Bootstrap   Flask   Jinja   Axios