

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 (on Azure Marketplace)
- Developing web content using Node.js, React.js, Bootstrap, HTML, CSS, Azure SQL and Azure Web Sites
- Enabling single sign-on with Google, Facebook & Azure Active Directory

CodeLabs Intern

CodeDay

July 2020 – August 2020

Remote

- Built a resume classification platform using Node.js, Express.js, Keras and TensorFlow for Python based on potential matching job categories
- Implemented data processing pipeline using Natural Language Toolkit (NLTK) and regular expression filtration techniques
- Used tokenization and padded sequencing methods for encoding 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 allow 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%

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
- 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 & the Spotify Web API for user authentication and data collection, and Bootstrap & Dash for data visualization
- Project progress can be viewed at <https://spotivizual.herokuapp.com/>

EDUCATION

B.S. in Computer Science

University of Washington, Seattle

September 2018 – June 2021

- GPA:** 3.98/4.00
- Minor in Mathematics
- Admitted to the Combined B.S./M.S. program in Computer Science; graduating with M.S. in June 2022
- Microsoft Endowed Scholarship (2019-20)
- Su Family Endowed Scholarship (2020-21)
- Relevant Coursework Taken:**
 - Systems Programming
 - Data Management / Databases
 - Data Structures and Parallelism
 - Software Design and Implementation
 - The Hardware/Software Interface
 - Discrete Mathematics and Probability
 - Linear Algebra and Analysis
 - Scientific Computing
 - Differential Equations
 - Engineering Statics and Dynamics
- Current Relevant 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