ABHISHEK BABU

@ babua@cs.washington.edu   📞 +1 (425) 677-5305   🔗 abhishekbabu.me
github.com/abhishekbabu   in linkedin.com/in/abhishek-babu

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 applications.

EXPERIENCE

Software Engineering Intern
Pārv.ai

📅 June 2020 – September 2020   📍 Redmond, WA

– Pārv.ai is an AI-based educational platform interacting with various MOOC providers including Udemy and edX (on Azure Marketplace)
– Developed web content using Node.js, React.js, Bootstrap, HTML, CSS, and Azure Web Sites
– Leveraged Azure SQL for authentication data and for experimentation in **SSO authentication** with Google, Facebook and 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** in TensorFlow using Natural Language Toolkit (NLTK) and regular expression filtration techniques
– Used tokenization and padded sequencing to encode resume data
– Developed a **CNN architecture** to generate probability distributions for resume category 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

– 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

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 & D3.js for data visualization
– Project in development can be viewed at spotivizual.herokuapp.com

ReadAct   📅 October 2020

– A Chrome extension that analyzes political bias and provides information about candidates and measures referenced in articles read by the user
– Leveraged the Bipartisan Press and WeVote APIs for conducting bias analysis and political information retrieval
– Leveraged the Azure Text Analytics API for entity/key phrase extraction and D3.js & Bootstrap for the frontend design

EDUCATION

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

📅 September 2018 – June 2021

– Combined B.S./M.S. program in Computer Science **(M.S. graduation in June 2022)**
– **GPA:** 3.98/4.00
– **Data Science option** in B.S.
– **Minor in Mathematics** for B.S.
– Su Family Endowed Scholarship (2020-21)
– Microsoft Endowed Scholarship (2019-20)
– **Prior Coursework:**
  - Systems Programming
  - Data Management
  - Data Structures and Parallelism
  - Software Design and Implementation
  - The Hardware-Software Interface
  - Discrete Math | Probability & Statistics
  - Linear Algebra | Linear Analysis
– **Current Coursework (Fall 2020):**
  - Machine Learning (Graduate Course)
  - Data Visualization
– **Upcoming Coursework (Winter 2021):**
  - Algorithms
  - Database Systems Internals
  - Computer Security
  - Advanced Linear Algebra

SKILLS

Languages

Python   Java   C++   C#   C
JavaScript   MATLAB

Databases

SQL   Azure SQL   Firebase   SQLite
Cypher   neo4j   SQL++

Data Science & Visualization

TensorFlow   Keras   scikit-learn
NumPy   Azure Cognitive Services
Google Cloud Platform   D3.js   NLTK
OpenCV   Matplotlib   Tableau

Web Development

HTML   CSS   React.js   Express.js
Node.js   Flask   Bootstrap   jQuery