

# 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 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 for the SaaS platform using Node.js, React.js, Bootstrap, HTML, CSS, and Azure Web Sites

### 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 **convolutional neural network** 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 Haar Cascade classifiers to optimize API calls, **reducing application cost by 90%**

## PROJECTS

### SpotiViz

📅 July 2020 – Present

- A web application for users to visualize and analyze their Spotify listening data across variable timeline ranges
- Leveraging Python + Flask + Spotify Web API for user authentication and data retrieval, and Bootstrap + D3.js for data visualization
- Project under construction can be viewed at [spotivizual.herokuapp.com](https://spotivizual.herokuapp.com)

### ReadAct (for DubHacks 2020)

📅 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 Bootstrap + D3.js for the frontend design

## EDUCATION

### M.S. in Computer Science

#### University of Washington, Seattle

📅 September 2021 – June 2022 (Expected)

- Combined B.S./M.S. Program
- **Selected Graduate Coursework:**
  - Machine Learning for Big Data
  - Machine Learning

### B.S. in Computer Science

#### University of Washington, Seattle

📅 September 2018 – June 2021

- **GPA:** 3.98/4.00
- Data Science Option & Minor in Mathematics
- **Honors and Awards:**
  - Su Family Endowed Scholarship (2020-21)
  - Microsoft Endowed Scholarship (2019-20)
- **Selected Undergraduate Coursework:**
  - Algorithms | Data Structures & Parallelism
  - Database Systems Internals
  - Data Management | Data Visualization
  - Computer Communication Networks
  - Security | Systems Programming
  - The Hardware-Software Interface
  - Software Design & Implementation
  - Discrete Math | Probability & Statistics
  - Advanced Linear Algebra | Linear Analysis

## SKILLS

### Languages

Python    Java    C++    C#    C    Julia  
JavaScript    MATLAB    R    Assembly

### Data Science & Visualization

PyTorch    TensorFlow    Keras    NLTK  
Apache Spark    scikit-learn    OpenCV  
Jupyter    D3.js    Tableau

### Cloud & Databases

Microsoft Azure    MySQL    SQLite  
Google Cloud Platform    Firebase

### Web Development

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