

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

Lead Software Engineer

Cledge (cledge.org)

📅 June 2021 – Present

📍 Redmond, WA

- Creating a platform to democratize the college counseling process
- Building the end-to-end backend framework for **user profiling** and a **content recommendation algorithm** using Flutter and Firebase, along with content entry points in Node.js and React.js
- Responsible for the product development life cycle and prototyping the alpha version of the MVP, slated for release in August 2021
- Picked up by **Microsoft for Startups** in July 2021

CodeLabs Intern

CodeDay

📅 July 2020 – August 2020

📍 Remote

- Built a **resume classification platform** using insights in job categorization and natural language processing techniques in Python
- Implemented a data processing pipeline in TensorFlow with Natural Language Toolkit (NLTK) to extract meaningful content from resume text
- Developed a **convolutional neural network** architecture to generate probability distributions for resume category classifications
- Integrated the data processing pipeline and neural network in a Node.js and Express.js web server deployed on Heroku

Software Engineering Intern

Tata Consultancy Services

📅 August 2019 – September 2019 📍 Bellevue, WA

- Developed a .NET Core cross platform application with C# on 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 (spotivizual.herokuapp.com)

📅 July 2020 – Present

- Developing a web application for users to analyze their Spotify listening data across variable timeline ranges
- Using Flask for Python, Spotify Web API and Bootstrap to build the web server, user authentication, data retrieval and user interface

ReadAct (DubHacks 2020)

📅 October 2020

- Developed a Google Chrome extension that **analyzes political bias** and provides information about political 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 user interface

EDUCATION

M.S. in Computer Science

University of Washington, Seattle

📅 September 2021 – June 2022 (Expected)

– Combined B.S./M.S. Program in CSE

– **Selected Graduate Coursework:**

- Machine Learning for Big Data
- Machine Learning

B.S. in Computer Science

University of Washington, Seattle

📅 September 2018 – June 2021

– **GPA:** 3.97/4.00

– 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 JavaScript C# C++
Dart HTML CSS MATLAB C

Data Science

Apache Spark PyTorch scikit-learn
Apache MLlib Jupyter OpenCV
TensorFlow Keras NLTK

Cloud & Databases

Firebase Microsoft Azure Heroku
Google Cloud Platform SQL/NoSQL

Web & App Development

React.js Express.js Node.js Flask
Flutter D3.js jQuery Jinja REST