ABHISHEK BABU

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EXPERIENCE

Incoming Software Engineer

Robinhood

Menlo Park, CA

Aug 2022

Lead Software Engineer



- Spearheaded the engineering team in an Agile environment to create a web platform that democratizes personalized college counseling
- Built the user profiling functionality and a heuristic content recommendation algorithm using Flutter and a Cloud Firestore database on Firebase
- Developed database management consoles using Node.js and React.js, resulting in a **75% reduction in data entry time** for content developers
- Built a Python data pipeline using Apache Spark to populate an Azure Cognitive Search Index with data from the College Scorecard dataset
- Built an automated Python web scraper using Selenium to scrape non-copyrighted college campus images from Google Images
- Cledge was picked up by Microsoft for Startups in July 2021

CodeLabs Intern

CodeDay ♀ Remote

Jul 2020 - Aug 2020

- Built a resume classification platform to predict job categories of resumes using 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 multiclass convolutional neural network to classify processed resumes, achieving 87% test accuracy
- Deployed the neural network on a Node.js + Express web server to Heroku

Software Engineer Intern

Aug 2019 - Sep 2019

- Developed a .NET Core cross platform application with C# on a Raspberry Pi 4 to snapshot a conference room at regular intervals and gain insights into conference room usage throughout the work day
- Leveraged Azure Cognitive Services' Computer Vision API and Face API for human detection and facial recognition analysis on snapshots
- Populated an Azure Table Storage key-value store and an Azure Blob Storage data lake with time-stamped analysis results and snapshots
- Implemented offline human detection with OpenCV Haar Cascade classifiers to optimize API calls, reducing the application cost by 90%

PROJECTS

SpotiViz (spotivizual.herokuapp.com)

Jul 2020 - Aug 2021

Developed a web application to authenticate users with their Spotify account and display their listening data such as their recently played and most played artists and tracks across variable timeline ranges.

Technologies: Python, Flask, Requests, Spotify Web API, Bootstrap, HTML/CSS

ReadAct (DubHacks 2020)

₩ Oct 2020

Developed a Google Chrome extension that analyzes political bias in news articles read by the user and displays information about politicians and measures referenced in the articles in a popover.

Technologies: Bipartisan Press API, WeVote API, Azure Text Analytics, JavaScript, jQuery, Bootstrap, D3.js, HTML/CSS

EDUCATION

M.S. in Computer Science

University of Washington

- **GPA:** 3.94/4.00
- Combined B.S./M.S. Program in CSE
- Capstone: Data Science Capstone
- Selected Graduate Coursework:
 - Natural Language Processing
 - Machine Learning for Big Data
 - Deep Learning | Machine Learning

B.S. in Computer Science **University of Washington**

- **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:
 - Database Internals | Data Structures
 - Operating Systems | Computer Security
 - Computer Networks | Algorithms
- Data Visualization | Data Management
- Systems Programming | Linear Analysis
- Advanced Linear Algebra

SKILLS

Languages

Python Java **JavaScript** C++ **MATLAB TypeScript** Dart C

Data Science & Visualization

Apache Spark PvTorch scikit-learn TensorFlow OpenCV NetworkX Keras **NLTK** MatchIt statsmodels Matplotlib Seaborn pandas D3.js

Cloud & Databases

Firebase Microsoft Azure Heroku Google Cloud Platform SQL/NoSQL

Web & App Development

JUnit HTML/CSS | Express Flask Flutter Node.is React.is Selenium Bootstrap **j**Query REST Jinja