ABHISHEK BABU

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Inquisitive and detail-oriented computer science student with strong foundations in systems development, data engineering and machine learning, along with extensive experience building well-tested and functional applications.

EXPERIENCE

Incoming Software Engineer
Robinhood 📍 Menlo Park, CA   📅 Aug 2022

Lead Software Engineer
Cledge *(cledge.org)* 📍 Seattle, WA   📅 Jun 2021 – Oct 2021

– 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
Tata Consultancy Services 📍 Bellevue, WA   📅 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

📅 Sep 2021 – Jun 2022   📍 Seattle, WA

– Combined B.S./M.S. Program in CSE

– **Capstone:** Data Science Capstone

– **Selected Graduate Coursework:**
  • Machine Learning for Big Data
  • Deep Learning | Machine Learning

B.S. in Computer Science
University of Washington

📅 Sep 2018 – Jun 2021   📍 Seattle, WA

– **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 Internals | Data Management
  • Data Visualization | Systems Programming
  • Computer Networks | Computer Security
  • Advanced Linear Algebra | Linear Analysis
  • Probability & Statistics | Discrete Math

SKILLS

Languages

Python | Java | JavaScript | C# | C++ | TypeScript | Dart | C | MATLAB | R

Data Science & Visualization

Apache Spark | PyTorch | scikit-learn | OpenCV | TensorFlow | D3.js | NLTK | pandas | NetworkX | Matplotlib

Cloud & Databases

Firebase | Microsoft Azure | Heroku | Google Cloud Platform | SQL/NoSQL

Web & App Development

HTML/CSS | Express | Flask | JUnit | Node.js | React.js | Selenium | Flutter | Bootstrap | jQuery | REST | Jinja