

ABHISHEK BABU

@ abbabu0411@gmail.com
abhishekbabu.github.io

in linkedin.com/in/abhishek-babu
github.com/abhishekbabu

+1 (425) 677-5305

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 API, Chrome Extension API, JavaScript, jQuery, Bootstrap, D3.js, HTML/CSS

EDUCATION

M.S. in Computer Science

University of Washington

📅 Sep 2021 – Jun 2022 📍 Seattle, WA

– **GPA:** 3.84/4.00

– Combined B.S./M.S. Program in CSE

– **Capstone:** Data Science Capstone

– **Selected Graduate Coursework:**

Machine Learning, Machine Learning for Big Data, Deep Learning, Natural Language Processing, Artificial Intelligence, Computational Complexity

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:**

Systems Programming, Data Management, Data Visualization, Algorithms, Database Systems Internals, Computer Security, Computer Networks, Operating Systems, Computer Vision

SKILLS

Languages

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

Data Science & Visualization

Apache Spark PyTorch scikit-learn
OpenCV TensorFlow NetworkX
Keras NLTK MatchIt statsmodels
pandas Matplotlib Seaborn D3.js
Jupyter Notebook Vega-Lite p5.js

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