# Frank Pacini

## EDUCATION

## **Boston University**

Expected May 2023

B.A. in Computer Science & Statistics

GPA: 3.97 Overall, 4.00 Major

• Selected Coursework: Algorithms, Deep Learning, Data Science, Machine Learning, Big Data (expected), Operating Systems, NLP (expected), Programming Languages, Cybersecurity, Linear Models, Probability

#### SKILLS

Languages: Python, Java, SQL, Go, Javascript, C, Bash, Dart, OCaml, Matlab

Frameworks & Libraries: PyTorch, TensorFlow, NumPy, Scikit-learn, React.js, Telegraf, Vue.js

Tools & Systems: Azure, Google Cloud, Docker, MySQL, MongoDB, CI/CD, Linux, Git

#### EXPERIENCE

## **Dell Technologies**

June - August 2022

Software Engineer Intern

Hopkinton, MA

• Developed extension for the Oracle Enterprise Manager database platform in Java and Javascript to collect and display hardware-level statistics and alerts, enabling database admins to effectively troubleshoot their systems.

## BU Spark! & Civera Software

February 2022 - May 2022

Software Developer Intern

Boston, MA

• Implemented a web scraper for masscourts.org and data pipeline with Python, MySQL and AWS to provide an easily accessible, comprehensive dataset of Massachusetts court cases to researchers and policy makers.

## **Dell Technologies**

May 2021 - August 2021

Software Engineer Intern

Remote

- Developed plugins in Go to support data processing and execution of any Tensorflow ML model within the Telegraf data collection infrastructure, significantly reducing evaluation time on the collected metrics.
- Built neural networks in Tensorflow to predict GitHub repository activity, enabling more efficient scheduling of IT maintenance periods. Curated and trained on a dataset of 1,000,000+ internal commits.
- Deployed an end-to-end time series data pipeline and visualization dashboard with Docker and SQL to enable monitoring of various hardware metrics on Dell systems.

#### Hack4Impact at BU

September 2020 - June 2021

Project Lead & Software Developer

Remote

- Oversaw a team of 10 student developers to create a content delivery site using React.js with Material-ui and Firebase for local non-profit EatWell Meal Kits.
- Engineered recipe and video tutorial pages, user program management, code-based authentication and various administrative features.

#### Projects

## Genius.com Song Recommendation | PyTorch, Django, React.js, Azure

- Developed a full-stack web app in React and Django with the Genius API where users can discover similar songs.
- Trained a BERT model to recommend lyrically-related tracks and supported inference with Azure Functions.

#### **ANEDA** | PyTorch, Flask, Leaflet.js

• Trained an embedding-based graph representation model to predict optimal routes within large cities using network data from OpenStreetMap. Developed routing demo in Leaftlet.js and Flask for the Boston-area street network.

## **QR** Attendance | Vue.js, Flask, MongoDB

• Created a QR code based authentication app to easily log and monitor member meeting attendance, improving efficiency of chapter proceedings by 40%.

#### Foster Friends | Flutter, Dart, Firebase

• Built account forms, search, and interface to Firebase for a mobile app that connects adopters to animal shelters.

# ACHIEVEMENTS

- Microsoft Azure Fundamentals Certification Issued July 2022
- Dell North America Intern Hackathon 2nd place