# Charlie Denhart

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#### EDUCATION

Northeastern University

Boston, MA

Candidate for Master of Science in Computer Science

Expected August 2021

Bachelor of Science in Data Science and Economics/Mathematics

August 2020

• Activities: Alpine Ski Team, Economics Society (President), Federal Reserve Challenge Team

The London School of Economics and Political Science

London, UK

July - August 2018

Experience

Study Abroad

Northeastern University

Boston, MA

Research Assistant - Multi-Modal Unsupervised EHR Summarization

January 2021 - Present

• Built a Flask app visualizing radiology reports overlayed with joint image/text attention from PyTorch models

Research Assistant - Auditing Algorithms to Predict Opioid Use Disorder

December 2020 - Present

• Contributed to an ETL pipeline that processes insurance claims data, used for predicting opioid abuse

Research Assistant - Black-Market Opioid Pricing

November 2019 - Present

- Designed a program that infers black-market opioid user's locations using conversations from online forums
- Constructed an ETL pipeline to persist data extracted from Reddit in a MongoDB database

Care Dash Cambridge, MA

Software Engineering Intern

June - August 2020

- Deployed features to an internal CMS, built with Flask
- Researched and evaluated incorporating BERT into a system for detecting fake physician reviews

Parquet Capital Boston, MA

Data Science Intern

September – December 2019

- Explored integrating various data modeling strategies into trading strategies for SPACs using Scikit-Learn
- Communicated closely with the chief investment officer, presenting results and findings through Jupyter Notebooks

### Acadian Asset Management

Boston, MA

Business Analyst/Developer Intern

May - August 2019

- Reduced the time of business-side workflows by several hours through automation with Python programs
- Collaborated with business and IT departments to identify areas for process improvement and design solutions

Jacob Realty Boston, MA

Real Estate Agent

January 2018 - November 2019

• Generated over \$35,000 in revenue through commission from rental properties in the Greater Boston Area

Cambridge, MA **FrontStream** 

Marketing and Sales Intern

September – December 2016

Organized Salesforce/Excel datasets and coordinated with sales/marketing teams to process leads more efficiently

#### Projects

Maze Solving Robot using Q-Learning  $\mid C++, Arduino, Git$ 

Fall 2020

• Wrote a Q-learning algorithm from scratch that trains a robot to solve a physical maze

### ICD Tagging with Recurrent Neural Networks | PyTorch, Jupyter

Fall 2019

• Trained a long short-term memory model to assign ICD-9 diagnostic codes to free text clinical notes

## SKILLS

Languages: Python, Java, SQL (Postgres), JavaScript, HTML/CSS, R, C++

Frameworks/Tools: PyTorch, Scikit-Learn, Flask, Bootstrap, Git, React, Jupyter, HuggingFace, AWS