# Vin Huvnh

(727) 546-1061 | huynhduybao1312@gmail.com | bdhuynh.vercel.app github.com/VinBHuynh | linkedin.com/in/baohuynh12/

**EDUCATION** 

Worcester Polytechnic Institute (WPI) | Worcester, MA

BS in Computer Science | GPA: 3.87 (Dean's List, With High Distinction)

MS in Computer Science | GPA: 3.76

May 2023 May 2023

**SKILLS** 

Languages: Java, Python, SQL (PostgreSQL, MySQL, SparkSQL), C++, JavaScript, React, HTML, CSS Software: VS Code, Git, AWS, Oracle, Docker, Firebase, spaCy, Doccano, Jupyter Notebook, Google Suite

## **EXPERIENCE** Wildlife Trafficking REU | WPI | Research Assistant

- Performed comprehensive research across multiple social platforms to detect and analyze wildlife trafficking activities.
- Operated with a convicted trafficker to report intelligence on wildlife trafficking within private messaging apps.
- Utilized the InstaLoader API to scrape over 500 Instagram posts containing specific wildlife-related keywords.
- Cleaned duplicated wildlife posts from estimated 700 to 400 entries for database.

## Change for Change | Remote | Software Engineering Intern

May – August 2021

- Developed a Chrome extension incorporating Figma interface designs intended as donation portfolios.
- Integrated synchronous Firebase database storing users' information and donating activities.
- Implemented Google Authentication handled by Firebase Auth and social media sharing.

# **PROJECTS**

## Wildlife Crime Media Aggregator | WPI | Major Qualifying Project

**August 2022 – April 2023** 

- Achieved Name Entity Recognition (NER) model to identify wildlife trafficking information with 94% F1-scoring.
- Documented 300 online Indian news articles and annotated 14 entity types identified with domain experts.
- Trained and evaluated 4 unique NER models with combinations of different architectures and tokenization methods.
- Prototyped spaCy models with previous project's entity rulers for baseline performance of 20% F1-scoring.
- Designed and deployed static website hosting interactive Tableau visualizations for extracted data.

## Subreddit Classification | WPI

January – April 2023

- Collected 5100 post titles using Async PRAW, then vectorized input using sklearn CountVectorizer.
- Achieved 77% F1-scoring with Linear SVC among 7 models, then visualized classified categories using t-SNE.

# Yelp Restaurant Review | WPI

August - December 2022

- Predicted popular sentiment of users' reviews using multi-class classification via Fine-Tune BERT language model.
- Initialized multi-label classification for reviews' sentiments threshold via Fine-Tune BERT.
- Improved classification accuracy from BERT's 25% to LSTM Neural Network's 94%.
- Implemented regression model using TensorFlow's Keras Sequential model to quantify users' sentiments.

#### AWS Store Management System | WPI | Backend Developer

August – December 2022

- Orchestrated microservices under Amazon API Gateway for REST API endpoints using AWS lambda functions.
- Deployed serverless application with AWS S3 hosting static HTML, CSS, and JavaScript files.
- Designed ERD for product entities within customers and stores' domains.
- Utilized AWS RDS for hosting MySQL database to organize and maintain entity data according to ERD guidelines.
- Implemented clean architecture codebase for features' flexibility and maintainability.

# Brigham & Women's Hospital Application | WPI | Backend Technical Leader

January – March 2021

- Facilitated efficient remote collaboration within an eleven-member team, leveraging Agile Scrum and Trello.
- Bridged communication gap with frontend team via ERD and seamless integration of FXML controllers to database.
- Upheld uniformity and consistency in database designs by implementing singleton and façade OOP design patterns.
- Utilized Oracle SQL with anti-NoSQL injection layer, enforced type-safe and performant database access with JDBC.
- Implemented critical features such as pathfinding, COVID-screening surveys, service requests, and parking.

### **LEADERSHIP**

# Western New England Medical Transport | Remote | ITS Technician

March 2022 - Present

Organize local database of transportation data for over 10 drivers.

# Homewatch Caregivers | Bridgewater, MA | ITS Technician

January 2022 – Present

Systematize financial data of homecare services for over 100 employees and elders.

# Capacity | Zurich, Switzerland | Interactive Qualifying Project

August - October 2021

Formulated a scale-up strategy for entrepreneurship programs based on stakeholder input and industry research.

#### **COURSES**

- **Information System**
- Natural Language Processing
- User Experience Design
- **Database Systems**
- Big Data Management and Analytics
- Object-Oriented Analysis and Design