

# Nikki Phach

.....  Boston, MA |  (401) 585-3212 |  nikkiphach@gmail.com |  nphach |  in/nphach .....

As a first-generation American and the first in my family to attend university, my drive for knowledge focuses on AI and machine learning. My involvement was sparked by my personal interest in Japanese, especially as it relates to NLP technology. I seek to utilize my skills within a team that encourages ongoing learning, collaboration, and offers opportunities for growth in software development.

## Education

### University of Massachusetts Boston

B.Sc. in Computer Science

Boston, MA

(expected May 2024)

- Advanced Data Structures and Algorithms (Java)
- Applied Discrete Mathematics ( $\text{\LaTeX}$ )
- The Structure of Higher Level Languages (Racket)

### Supervised Machine Learning: Regression and Classification

DeepLearning.AI, Stanford University

Coursera

January 2024

## Projects

### AI Gesture Recognition for Naval Operations • (Python)

Fall 2023

- conducted data preprocessing using Pandas and Numpy; implemented KMeans clustering for initial gesture data categorization and insight generation
- applied supervised classification methods such as Gaussian Naive Bayes, Logistic Regression, K-Neighbors and Random Forest using scikit-learn to classify gesture data
- presented performance of classification methods by comparing ROC-AUC score and confusion matrix metrics

### Memory Debugging Monitor Replication • (C Lang)

Fall 2023

- created functions for reading and writing to memory to addresses in a simulated embedded system
- cross-compiled for execution on both Linux and an SAPC for analysis of memory protection in different environments

### Simple Banking Application • (C Lang)

Fall 2022

- developed application enabling users to perform banking operations like deposits, withdrawals, and balance checks through secure login
- utilized socket programming for handling multiple concurrent server connections
- implemented Caesar cipher for encryption, ensuring secure data transmission between server and client

## Work Experience

### Waitress and Line Cook

2015 - present

Newport Creamery, Mokban Korean Bistro, Balance Patch

- communicated actively with customers and restaurant staff
- prioritized tasks by urgency and importance to enhance efficiency
- applied conflict resolution skills while maintaining a positive and professional atmosphere