Srinandha Murugesan

EDUCATION

University of California, Santa Barbara

June, 2028

Bachelor of Science, Computer Science

Goleta, CA

- **GPA: 3.94/4.0**; Dean's Honors
- Clubs: UCSB ACM, Data Science Club

CERTIFICATIONS, SKILLS & INTERESTS

- Certifications: Google Cybersecurity Professional (Nov. 2024), CompTIA Security+ (in progress)
- Skills: Python, Linux, SQL, Machine Learning, Data Science, Teamwork
- Interests: Cybersecurity, Machine Learning

PROJECTS

Calculator in Prefix/Postfix Notation

Oct. 2024

- Developed a calculator program to solve mathematical equations in Polish and reverse Polish notation
- Notation is determined by command line arguments and user-inputted string becomes tokenized and then evaluated based on mode
- Utilized Python (collections, sys), OOP (abstraction, composition), data structures (stacks, deques), tokenization, recursive functions, command line arguments, and multi-file input/output

Menu, Order Management System

Sept.2024

- Built a program that allows users to dynamically order items from a menu
- Implemented functionality to upload some file containing a menu, find/update items in either the menu/order, and communicate with the user through a formatted text interface
- Utilized Python, OOP (classes/objects, composition, encapsulation, methods), multi-file input/output, list/string manipulation, and interactive user/command line interface

Independent Research

July 2023 - Sept. 2023

- Analyzed and predicted trends within Billboard Top 50 weekly charts for 2022
- Collaborated with UPenn professor Clayton Greenberg on a coding project and research paper
- Utilized Python (sklearn, os, math), random forest, four-way classification models, and statistical testing metrics (OLS, Chi-Square, MAE, AIC, F-statistic); 85% accuracy for predicting song rise/fall based on chart entrance/exit

UCLA Computer Science Summer Institute

June 2023 - July 2023

- Studied data science, programming, and machine learning
- Worked on a collaborative project to predict strokes based on health attributes
 - o Utilized Python (sklearn), median imputation, logistic regression, KNN, SVM, decision trees/random forest, neural networks
- Placed 3rd at competition

Inspirit AI Scholars

June 2023 - July 2023

- Worked on preprocessing data in a group project predicting stock prices using tweets with 95% accuracy
- Utilized Python (sklearn), tokenizing, stemming, padding, BERT, NLP

WORK EXPERIENCE

Kumon Math and Reading Center

March 2022 - May 2024

Instructor Assistant

Agoura Hills, CA

- Assisted students in reading and math
- Managed online meetings with distance learning students
- Effectively communicated with parents under the lead instructor