# Srinandha Murugesan

#### **EDUCATION**

# University of California, Santa Barbara

June 2028

Bachelor of Science, Computer Science

Goleta, CA

- **GPA:** 3.88/4.0; Dean's Honors
- Clubs: ACM, Data Science, Google Developer Student, Indus
- Coursework: Intermediate Python, Problem Solving w/ Computer I, Machine Learning and Statistical Mechanics, Linear Algebra, Vector Calculus, Differential Equations

#### **EXPERIENCE**

Software Engineer April 2025 - Present

UCSB ACM Goleta, CA

 Project lead for PwC financial insights platform featuring transaction analysis, trend summarization/visualization, forecasting, and anomaly detection

# Undergraduate Research Engineer

April 2025 - Present

UCSB Vision Research Lab

Goleta, CA

Working with the Smithsonian to build and deploy image-stitching software to open source Bisque software

#### **CERTIFICATIONS, SKILLS, & INTERESTS**

- Certifications: Google Cybersecurity Professional (Nov. 2024), CompTIA Security+ (in progress)
- Skills: Python, Machine Learning, Data Science, Front-End (HTML, CSS, JS), Back-End (Flask), Microsoft Office
- Interests: Cybersecurity, Machine Learning, Statistics, Web Development

# **PROJECTS**

# Personal Website (srinandha-murugesan.github.io/website/)

Present

Uses HTML, CSS, and JS

#### Predicting Commit/PR Impact on GitHub Repos

Feb. 2025 - Present

- Working on a machine learning model to predict the impact of commits/PRs on repositories by analyzing messages using NLP
- Developing a full-stack application with Flask backend and HTML, CSS, JS frontend to display the model
- Utilizes Python, GitHub GraphQL API, NLTK, TF-IDF, BERT, sklearn, XGBoost, and evaluation metrics (precision, recall, F1 score)

### Independent Research

Sept. 2024 - Jan. 2025

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

#### **UCLA Computer Science Summer Institute**

June 2024 - Aug. 2024

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