# **ANISH LADDHA**

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# **Education**

Purdue University West Lafayette, IN August 2021 - May 2025

- Bachelors of Science in Computer Engineering, Concentration in Artificial Intelligence and Machine Learning
- GPA (M): 3.57; Dean's List and Semester Honors

Mission San Jose High School

Fremont, CA

August 2017 - June 2021

## **Experience**

#### **Software Engineer, Intern**

#### Visa Inc. [Foster City, CA]

May 2023 - August 2023

- Developed a real-time big data Proof of Concept application on the VisaNet platform using Hadoop and Apache Spark.
- Optimized processing through gradient descent and machine learning built on SparkLens, reducing runtimes by ~30% and saving hours of processing time and expensive compute resources.
- Enabled scalability to handle >100 requests per second, ensuring seamless operations during peak demand.
- Developed a full stack Flask (Python) and MySQL-based scalable app for optimization and data visualization.
- Presented project results effectively via a Grafana frontend for intuitive stakeholder insights.

#### **Software Engineer, Intern**

## Visa Inc. [Austin, TX]

May 2022 - August 2022

- Built a REST API from scratch using MySql, Java, SpringBoot, and Autowired on an Apache server, reducing project enrollment/update times by approximately 1 hour per project.
- Integrated the API with existing infrastructure supporting 20+ critical applications across the company.
- Addressed 21 high-level security issues in the Lighthouse test automation framework in Python, protecting against command line injection and file traversal attacks.

#### **Software Engineer, Intern**

#### Impressico Inc.

June 2020 - August 2020

- Analyzed millions of time series data points of heating, lighting, and motion information for Aramark buildings with large energy consumption.
- Utilized Python (pandas, numpy, matplotlib) to clean, process, and visualize data, and performed regression tests to create predictive models of energy use.
- Developed an optimal energy consumption and usage plan, considering energy costs and activity.

#### **Software Engineer, Shadow**

#### **Cisco Systems**

May 2020 - June 2020

- Developed on IOS XR operating system with fiber optic to ethernet switches
- Programmed in C and Python to create an embedded log processor/debugger that provided error and status codes for user-specified parameters.
- Automated the debugging process, reducing steps and time taken by ~50%, and clearing a major bottleneck

# **Projects**

**Spotify2Apple** — Python, PyQt5, Spotify/YouTube/AppleMusic APIs

- Created a cross-platform desktop application with PyQT to download Spotify playlists to Apple Music.
- Implemented multithreading to reduce download/editing time by approximately 80% and achieved a conversion rate of about 3 songs/second.
- Aggregated song metadata from Spotify and YouTube APIs and edited audio files using eyeD3.

**URL Shortener with Analytics** — Node.js, MongoDB, Express, EJS, HTML/CSS/JS

Developed a full-stack MERN URL shortener (similar to bit.ly), implemented features for tracking link/user statistics.

Uber/Lyft Price Comparison App - Swift, Xcode, Cocoapods, Google Maps/Apple Location APIs

# **Skills**

Languages: Python, Java, C, C++, HTML/CSS/Javascript, Swift

**Frameworks/Technologies**: Node.js, MongoDB, Numpy, Matplotlib, Matlab, Shell scripting, Springboot, Embedded, STM32 **Relevant Coursework**: Data Structures, Signals + Systems, Differential Equations, Linear Algebra, Electrical Engineering 1+2, Intro to Unix/Linux Shell Scripting, Intro to C++, Computer Networking, Python for Data Science, Microprocessors and Systems