# JOHNSON NGUYEN

San Jose, CA | Berkeley, CA

 $\begin{tabular}{l} $ \begin{tabular}{l} $ \begin$ 

#### **EDUCATION**

### University of California, Berkeley

Bachelor of Arts in Data Science (Business and Industrial Analytics), Minor in Computer Science

- · Relevant Coursework: Algorithms, Computer Programs, Data Structures, Data Science Foundations, Information Devices and Systems I & II, Machine Structures, Calculus I & II, Multivariable Calculus, Discrete Mathematics & Probability Theory, Elementary Statistics, Macroeconomic Principles, Microeconomic Theory
- · Current Coursework: Artificial Intelligence, Computer Security, Data Science Principles

#### WORK EXPERIENCE

#### **BAE Systems Incorporated**

Summer 2022

Expected: May 2024

Software Engineer Intern, Armored Multi-Purpose Vehicle (AMPV) Team

San Jose, CA

- · Worked in Testing and Integration developing and testing sequences using Python, C++, Linux Shell Scripting, and other tools and frameworks
- · Developed a full-stack application for SSH/SCP operations and internal tooling with a Tkinter GUI, integrated into a NI Teststand for simulating AMPV conditions
- · Performed MariaDB integrations into third-party applications and AMPV software for asynchronous and synchronous requests for test logs, maintained with Grafana LogQL

### UC Berkeley EECS Department

August 2021 - Present

Berkeley, CA

CS61A (Computer Programs) Academic Intern

- $\cdot$  Assist 30+ students in labs with debugging and reinforcing programming concepts
- · Give guidance to students on assignments, projects, and course material
- · Teaching topics include Python object-oriented programming, trees, Scheme, and SQL

#### Hillview Branch Library

May 2018 - August 2018

San Jose, CA

Tutor

- · Daily tutoring sessions with around 10 to 15 K-12 students as preparation for higher level math and writing courses
- · Direct weekly tutoring sessions with 3-5 students to reinforce statistics topics
- $\cdot$  Followed provided coursework alongside created problems for advanced math courses

#### **PROJECTS**

#### Course Catalog Webscraper — Python, HTML

Github: bit.ly/3tiKALM

- · Developed a simple Webscraper for the University of California, Irvine course catalog
- · Implemented a Python script using Selenium to simulate the catalog websocket and navigate the site, crawling all HTML page source content for class names, availability, professors, etc.
- · Parsed metadata using BeautifulSoup and RegEx to convert to a Pandas dataframe, outputted locally for a front-end application

## Discord Bot — Python

Github: git.io/JPt7M

- · Worked in conjunction with Discord's Python API to enable public user interactions with async and await information collection, server data mining, storing/look-ups for Discord user statistics in linear time, and active message scanning for relevant calculations
- · Parsed Discord user metadata for ease of manual modifications of user statistics, which includes user ID, timestamps upon joining, server ID, channel ID, and the user's progression in games and music

Gitlet — Java Github: Private Repo

- · Developed a simple version control system based on Git from scratch
- · Designed internal file structures with a SHA-1 hashing storage system to prevent collisions with various features for modifications
- · Implemented a constant time lookup storage system for commits across multiple branches using trees
- · Features include file tracking, branching, backup commits, merging, and remote usage

#### TECHNICAL SKILLS

Languages Python, Java, C, SQL, JavaScript, CSS/HTML, RISC-V Assembly, Scheme

Tools Git, Jira, Intel AVX, Matplotlib, Selenium Webdriver,

NumPy, Pandas, Matplotlib, Scikit-learn, Grafana, Tkinter, Paramiko