# **Mukund Subramaniam**

5032 Forbes Avenue • SMC 2094 • Pittsburgh, PA 15213 516.724.5352 • mssubram@andrew.cmu.edu

### Education

## **Carnegie Mellon University**

Pittsburgh, PA: Sept. 2018 - May 2022

Major: B.S. in Mathematical Sciences (Computational & Applied Mathematics)

Minors: Machine Learning and Computational Finance

GPA: 3.5/4.0

## **Relevant College Coursework:**

21-270 Intro. to Mathematical Finance10-301 Intro. to Machine Learning21-241 Matrices and Linear Algebra15-122 Data Structures in C36-226 Intro. to Statistical Inference21-369 Numerical Methods

# **Work Experience**

# Estee Capital LLC. (Quant-Based Investment Management Firm)

Millburn, NJ

Summer Quantitative Intern

July 2019 - August 2019

- Researched trading strategies based on the difference between realized volatility and implied volatility for the Nifty 50 (NSE Market Index)
- Implemented model for realized volatility and implied volatility calculation in Python (Pandas & NumPy), given a set of option prices using Newton's Method and the Black-Scholes Model
- Worked on competitive analysis for Gulaq, Estee Capital's Mutual Funds Advisory Application

#### **Davidov Financial Advisors**

New Hyde Park, NY

Summer Intern

June 2017 - August 2017

• Digitized and categorized client records and developed portfolio summary charts for clients

# **Projects**

### "Market Watch" - Pittsburgh, PA:

May 2019 - June 2019

- Created python program using Monte Carlo Methods to predict stock price movement and Web Data Extraction to visualize historical stock performance with line graphs drawn using Tkinter
- Tracked stock prices in real time using Yahoo! Finance API; allowed for personal stock price email alert system

### **Activities & Awards**

# **Data Science Club** (Member):

September 2019 - present

• Participated in several Data Science tool workshops in R and Tableau and currently working in a group on a machine learning/finance research project

### MoneyThink CMU (Mentor):

January 2019 - present

• Taught financial literacy and career preparation to students at Taylor Allderdice High School

### CMU Quant Club (Member):

September 2018 - present

• Participated in Market Workshops, Guest Lectures, and various Networking Sessions with banks

### Skills

Python (Matplotlib, NumPy, Pandas), C, R, MATLAB, GitHub, LaTeX, Microsoft Office, HTML and CSS