Shourya Mehra

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506, St. John's College, 82, Pok Fu Lam, Hong Kong

EDUCATION

The University of Hong Kong　　　　　　　　　　　　　　　　　　　　　　　**Hong Kong**
BEng Electrical Engineering, Finance Minor　　　　　　　　　　　　*Sept 2016- Expected May 2021*
- **CGPA:** 3.57/4.3
- **Honors:** 125% HKU Foundation Scholarship (2016-2021), Dean's Honors, Faculty Peer Mentor and Residential Student Advisor
- **Coursework:** Financial Engineering, Microcontroller Programming in C++, Mathematical Modelling of Engineering Problems in MATLAB, Investments & Portfolio Analysis, Multivariable Calculus, Linear Algebra, Probability, Statistics, Economics

IBM Data Science　　　　　　　　　　　　　　　　　　　　　　　　　　　**Hong Kong**
Professional Certificate　　　　　　　　　　　　　　　　　　　　　　　*April - Aug 2020*
- **Grade:** A
- **Modules:** Data Analysis using Pandas & Python, Data Visualization using Matplotlib & Seaborn, Machine Learning

SKILLS

Skills: Python, Pandas, MySQL, C++, HTML/CSS, Node.js, Arduino, MATLAB, Data Structures, Git

EXPERIENCE

Auroville Investment Management (HK) Limited　　　　　　　　　　　　　　**Hong Kong**
Technology Analyst, Part-Time Intern　　　　　　　　　　　　　　　*Nov 2020 - March 2021*
- Involved in development of an upcoming robo-advisory platform which uses Data Science and AI to create personalized portfolios
- Led the integration with brokerage & payment platforms by identifying best options through research & meetings with sales teams
- Collaborated with Interactive Brokers and used their API to build the trade execution module using the Python Flask framework which allows users to trade on the app, also built the templates module in Python which queries the MySQL database and returns the correct Interactive Brokers account opening template to user based on their investor type and selected management fee option
- Integrated Stripe one-time and subscription modules using Node.js, enabling users to purchase and subscribe to premium products

ON Semiconductor　　　　　　　　　　　　　　　　　　　　　　　　　　**Hong Kong**
Application Engineer Trainee, Analog Solutions Division, Full-Time Intern　　　　　　*Jun - Nov 2019*
- Developed a highly accurate and efficient voltage sensing circuit, taking it through phases of research, simulation, lab testing and optimization; final product achieved a 25% higher accuracy than demanded by the design requirements
- Automated the optimization of designed products by formulating, analyzing, and solving mathematical circuit models; developed tools enhanced efficiency, and will save the team over 20 hours of manual optimization work each time they are used

Siemens　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　**India**
Research & Development Trainee　　　　　　　　　　　　　　　　　　*July - Aug 2018*
- Collaborated with 7 teammates in the R&D of the lab testing station circuit designs; finished testing station enhances efficiency of the team by reducing lead time of new products by over 2 weeks
- Researched methodologies to enable UART communication between an inverter and an auxiliary converter for a proprietary product and programmed the solution on a microcontroller using C++; delivered solution reduces product cost by 5%

PROJECTS

Algorithmic Trading Bot in Python　　　　　　　　　　　　　　　　　　**Hong Kong**
Independent Project　　　　　　　　　　　　　　　　　　　　　　　　*Jun - Dec 2020*
- Created an algorithmic trading bot to trade on the forex market, developed strategies using technical indicators
- Collected time-series financial data by calling the OANDA API, performed data analysis in Python using Pandas, Numpy, & Scipy
- Hosted the bot on a remote AWS server to run 24/7, REST API integration for automated trade execution

Automated House Rental Recommendation　　　　　　　　　　　　　**Mumbai, India**
Independent Project　　　　　　　　　　　　　　　　　　　　　　　*April- Aug 2020*
- Implemented a Python based neighborhood recommendation system for renting a house in Mumbai, India based on user inputs; developed program can help users save over 10 hours in their apartment search
- Performed web scraping to collect the Mumbai property prices data and obtained the venues dataset by using the Foursquare API
- Analyzed, cleaned, and processed the datasets using Pandas and NumPy, using a statistical approach to fill in missing data values

LEADERSHIP & VOLUNTEER EXPERIENCE

Wrigley, Project Bloom　　　　　　　　　　　　　　　　　　　　**Manila, Philippines**
Volunteer　　　　　　　　　　　　　　　　　　　　　　　　　　　*Jun - July 2017*
- Devised an innovative program with 8 teammates to improve employee engagement and retention for Project Bloom aimed at eliminating poverty by inspiring entrepreneurship amongst hundreds of women in poverty-stricken communities of Manila

INTERESTS

Trading, Captain of the St. John's College Squash Team, Manchester United and Roger Federer fan, Mathematics, Sudoku Puzzles