

ROBERT F. CARANGELO III

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EDUCATION

Dartmouth College, Hanover, NH

Bachelor of Engineering, focus in Computer Engineering

Expected March, 2022

Bachelor of Arts, Engineering Sciences

June, 2021

Relevant Coursework: Software Design and Implementation, Problem Solving via Object Oriented Programming, Computer Networks, Microprocessors in Engineering Systems, Introduction to Machine Learning, Digital Electronics and Control Theory

GPA: 3.84 Honors: *magna cum laude*, Tau Beta Pi

TECHNICAL SKILLS

Programming Languages: Java, C++, C, VHDL, Matlab and Python

Software Development Tools: Maven, Git, LINUX, IntelliJ, UnitJ, Mockito, Gerrit, Jira, Valgrind, and GDB

Hardware: Xilinx ZBOE Z-7 Development Board, Oscilloscope, Raspberry Pi, and Function Generator

WORK EXPERIENCE

IMC Trading, Chicago, IL

June 2021-August 2021

Software Engineering Intern

- Designed, implemented, and tested improvements to a distributed error reporting system with the goal of reducing noise in trading system error logs
- Built an automated market making trader in a competitive mock trading environment that implemented hard risk limits, a price adjustment model and a volume offset model

Laboratory for Intelligent Integrated Networks of Engineering Systems, Hanover, NH

June 2020-August 2020

Research Intern

- Designed and built demonstration of a home automation system for the use of researchers at the Thayer School of Engineering to test home automation solutions

Nomura Holding America Inc., New York, NY

January 2020-March 2020

Investment Banking Analyst Intern

- Generated and presented ideas at client meetings alongside senior bankers
- Supported transactions and client presentations with financial, structural and business risk analysis

PROJECT EXPERIENCE

Bit-Vote, Computer Networks Final Project

May 2021

- Designed and implemented a decentralized peer to peer network using C programming that stores voting data in an immutable blockchain structure
- Built robust unit and integration testing programs that ensure proper handling of branching and to eliminate memory leaks

Snake IO, Personal Project

March 2021

- Used Java swing, multithreading and socket programming to build a multiplayer snake network game that gives players an individual view of the gameboard that moves and scales with that player's movements

Asynchronous Traffic Control System, Microprocessors Final Project

January 2021-March 2021

- Used an asynchronous state machine, interrupt handlers and callback functions to implement a mock traffic control system on a Xilinx microprocessor

Matching Engine, Personal Project

November 2020-December 2020

- Designed and implemented a command line order matching engine with C++ programming that compiles market and limit trade orders and executes trades on a time priority basis

Tiny Search Engine, Team Project

October 2020-November 2020

- Designed and implemented a web crawler, indexer, and querier modules with C programming that work together in a UNIX environment to search internet pages for the most relevant words to a user's search request

LEADERSHIP & ACTIVITIES

D-Trade, Hanover, NH

January 2018-May 2021

Co-President

- Developed a functional virtual trading platform that utilizes the Black-Scholes Model to price options of simulated equities
- Employed a range of basic trading strategies and hedges in an open market simulation with peers to accumulate the highest return on investment

SKILLS & INTERESTS

Language: Proficient in Spanish (Studied in Barcelona)

Interests: Club Baseball, Formula 1, hiking, Gamma Delta Chi Fraternity (treasurer), reading, and golf