

# MATTHEW A. HALL

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## SUMMARY

Hard worker, quick learner and first generation college graduate with a Bachelors in chemical engineering and masters in computer science looking to find a junior developer/software engineering role. The ideal position would be mainly development; helping to solve challenging and complicated problems. The last 3 years have been spent working on low latency trading systems, with daily tasks involving task automation, overseeing production trading environments and assisting algo trading developers with Redline's trading API. Side projects are programmed in C++, however, in the last 3 years, bash and python scripting has been learned on the job.

## SKILLS:

**Software:** Linux, Vim, Postgresql, Selenium

**Programming:** C++, Python, Bash, SQL, Data Structures, Algorithms, Machine Learning

## PROGRAMMING PROJECTS:

**Machine Learning Project:** Classification of the 26 capital english letters from a dataset of 20k letters using Principal Component Analysis, Support Vector Machine, k-Nearest Neighbor and Maximum Likelihood Estimation techniques. Coded assignments using Boosting, Naive Bayes, Fisher's Linear Discriminant with exposure to other techniques.

**Blackjack Simulator (C++):** Developed a blackjack simulator from scratch to run simulations on different strategies.

**Web Page Scraper (Python):** Used Selenium library in Python to scrape NBA data for use in a machine learning project.

**Various Personal Projects (C++ & Python):** Continuously developing projects for entertainment.

## INDUSTRY EXPERIENCE:

### **REDLINE TRADING CORPORATION – Production Support Engineer** June 2016 – Current

New York, NY

Manage production software/server deployments, network connections and reliability on Redline managed servers for trading clients. Servers run proprietary Redline low latency feed handling and execution gateway programs. Work with various hedge funds and banks to maintain maximum uptime in their production low latency trading environments (futures, equities and FX).

- Automate server and monitoring deployments for new trading customers, with bash and python.
- Provide solutions and manage expectations as primary customer contact.
- Driven multiple mission critical technical projects for various banks, hedge funds, dark pools with extremely stringent timelines.

### **PSE&G – Consultant / Sr. Project Controls Engineer**

September 2011 – March 2016

Newark, NJ

Managed \$200M budget allocated over 5 projects across multiple sites in NJ.

- Evaluated ongoing project progress by completing and maintaining project scoping documents, estimates, and cash flow.
- Prepared analysis and documentation for presentation to the project review board for future project funding.
- Provide analysis and procedure / work flow optimizations to senior management.

### **FLUOR – Sr. Project Controls Engineer**

June 2002 – August 2011

Held various roles delivering complex and challenging capital projects efficiently and cost effectively. Most projects in excess of \$1B. Work performed in many locations, including Iraq, Puerto Rico, New York.

- Created, managed, and analyzed multi-disciplined budgets & schedules for design & engineering (mechanical, process, architectural, electrical), procurement, construction, commissioning and startup activities.
- Spent 7 months in an Iraq war zone managing logistics of equipment/material deliveries coming from all over the globe. Coordinated deliveries/priorities to meet the construction schedule.
- Negotiated pricing and/or expedited deliveries with vendors, visited vendor shops to ensure they were meeting their schedules to keep projects on track.
- Aligned priorities across disciplines by attending cross functional meetings.

## EDUCATION:

**Stevens Institute of Technology**, Hoboken, NJ

May 2016

Master of Science in Computer Science, GPA 3.9

**Georgia Institute of Technology**, Atlanta, GA

May 2002

Bachelor of Science in Chemical Engineering

**New York University**, NY (C++ Certificate)

December 2013

## HOBBIES:

Training for an Ironman Triathlon. Chess. Poker. Reading science and math books.