

# Alexander James Federici

---

## Professional Experience

### Quantitative Trading Intern

TransMarket Group, Chicago, IL

Perform data analytics in Python and work with different company databases to aid in company research

November 2017 - Present

### Bookkeeper

Family First Physicians, Genoa, IL

Utilized Microsoft Excel and QuickBooks for bookkeeping

May 2016 - September 2016

### Technology Developer

Flameless, IN2 at Illinois Mathematics and Science Academy

Code developer for a safety product startup with a few other students at my school

September 2017 - Present

## Education

**Illinois Mathematics and Science Academy** -- Anticipated graduation May 2018

**Northern Illinois University** -- Calculus (Summer 2016)

**MIT EDx** -- Online Machine Learning course (Spring 2017)

**Massachusetts Institute of Technology** -- BeaverWorks Summer Institute (Summer 2017)

## Extracurricular Activities

### Programming

Intermediate mastery of Java, C#, C++, Python, Bash - mostly through independent studying

Experience with Github and many libraries within each language

September 2015 - Present

### Chess Team

2017 IHSA State Championship team. 1st place team chess at the Bolingbrook Raider tournament. 1st place team in the Far Side Suburban

Conference Tournament. 2nd place individual at the 2017 Illinois State Class Championship

September 2016 - Present

### Investing

Co-President of the Economics and Finance Club and casual trader of stock options and bitcoin

Self-taught microeconomics and macroeconomics, scoring 5 and 4, respectively, on the AP exams

2012 - Present

### Basketball

Three year varsity basketball player and current team captain

2013 - Present

### Total Applied Learning for Entrepreneurs (TALENT)

Participate in entrepreneurship events such as PowerPitch, a local pitching event of social good/technology startups to a panel of judges

October, 2015 - Present

**Running** - Disney World half marathon finisher

**Piano** - self-taught since third grade

## Leadership/Service

**Wing Guide** - over 100 service hours dedicated to leading the 24 students in my dorm and bettering and the campus

**Student Council** - representative for the Junior Class Club

**Tutor** - mentor for underrepresented middle school students who struggle personally and academically through the Exodus program. Also serve as a peer tutor in all academic subjects, including upper level math and computer science.

**Ethics Facilitator** - student facilitator in school ethics program; assist underclassmen apply the content to their lives

## Achievements/Certificates

AP Scholar with Distinction

Illinois State Scholar

National Merit Commended Scholar

CPR and First Aid Certified

Reached three out of the five levels in the Google Foobar Coding Challenge

### Cyber Security and Cyber Forensics

Invited to compete nationally in NYU's High School Forensics Challenge and was ranked #1 in the Midwest

### BWSI Best Cognitive Assistant

2nd place in cognitive assistant showcase at Beaverworks Summer Institute at MIT for program using machine learning for voice and face recognition. Also used RNNs for text generation, and fast fourier transforms for the smoothing of stock market data.