# MICHAEL ZHENG

# Mathematics/Financial Analysis and Risk Management (FARM) and Statistics



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# EDUCATION

## B. MATH, HONOURS FARM AND STATISTICS DOUBLE MAJOR - University of Waterloo

Sep. 2018 - Apr. 2023

Relevant coursework:

- · Financial Mathematics: discount/interest rates, annuities, sinking funds, mortgages and bonds, yield rates
- · Computational Finance: portfolio optimization, Monte Carlo methods, hedging strategies
- · Introduction to Investments: capital markets, equities, futures, forwards, swaps, options

### Skills and Interests:

- · Technical: Python, SQL, NoSQL, Excel, VBA, C, R, HTML, CSS, JIRA
- · Interests: FinTech, coding, hackathons, music, competitive swimming, badminton, travelling
- · Certifications and Awards: FRM Level 1 Candidate (November 2020), Bayesian case compeition finalist (4th place)

# WORK EXPERIENCE

# **BUSINESS ANALYST - TD Securities (Global Equity Derivatives)**

Jan. 2020 - Apr. 2020

- · Supported the equity derivatives team with business requirements and solutions under time-sensitive situations
- Took ownership of Echo (MongoDB), improving the performance by vetting and improving queries used by stakeholders
- · Conducted the new Volatility Index product onboarding for GED front office to capitalize on market conditions
- · Implemented a new process workflow for dividend data, leading to a 30% faster output for accurate information

# **DATA COLLECTION ANALYST - TritonWear**

May. 2019 - Aug. 2019

- · Responsible for the collection, annotation and analysis of swim data using annotation tools and Python scripts
- · Used Trello's REST API to create project management tools to track each employer's projects and work completed
- Implemented a video processing script using Python that decreased processing data time by 52.6%

#### WEAPONS TECHNICIAN - Department of National Defense (DND)

Jun. 2017 - May. 2019

- · Maintained weapons to a high degree, exceeding the standards of the Canadian Armed Forces
- · Demonstrated efficiency under high stress situations by devising plans that played to the strengths of all teammates

# LEADERSHIP EXPERIENCE

#### MARKET RESEARCH ANALYST - FARM Student Association (FARMSA)

Sep. 2019 - Dec. 2019

- · Researched and wrote financial market articles for the monthly FARMSA newsletter using Bloomberg and Reuters
- · Presented market commentaries and financial seminars biweekly to an audience of students

## FINANCE ASSOCIATE - University of Waterloo Ascend Chapter

Jan. 2019 - Apr. 2019

- · Responsible for fund pitching, sponsorship and the termly operating budget surplus
- · Developed relationships with established individuals in the business and finance field

# PROJECTS

#### STOCK TRADING - Questrade/Wealthsimple Trade

Jan. 2019 - Present

- · Built a diversified financial portfolio, including stocks, ETFs and mutual funds from North American markets
- · Achieved a 25% return in 10 months by trading short term options using the covered call strategy

#### PERSONAL WEBSITE - michaelzheng.me

Jul. 2019

- · Developed a professional responsive website to display information and achievements
- · Created using HTML, CSS, JavaScript and Bootstrap

# **NBA REDDIT BOT - TOHacks**

Jun. 2019

- · Automated bot that posts game statistics on all NBA players whenever the name is mentioned on Reddit
- · Created with Python using PRAW (Reddit API), NBA API, pandas and requests libraries

## **BUSINESS PLAN - OneKey**

Oct. 2018 - Nov. 2018

- · Wrote a mock business plan with a team and contributed market analysis, competitor analysis and financial needs
- · Achieved a top 5% award overall for best startup business plan