

# Matthew Pan

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## Education

### Bachelor of Science, Computer Science

Concordia University – Montreal, QC.

Courses: Data Structures & Algorithms, Java OOP, Web Applications, C++ Program Design, Big Data Analytics.

## Experience

**Cisco Systems, Inc.** – San Jose, CA.

May 2021 – Now

### Software Engineer Intern

Full-stack development on their CX Cloud platform (**Java, Angular, AWS**).

**Genetec, Inc.** – Montreal, QC.

Jan 2021 – Apr 2021

### Software Developer Intern

Full-stack development in a large microservice codebase following the Kanban methodology with Azure DevOps.

- Improved software security by implementing **back-end** features such as tracking screenshots taken from a video and implemented/debugged over 20 **front-end** features (**C#, REST APIs, ReactJS, TypeScript, Redux, Flux**).
- Reduced CPU usage of their app by up to 20% by implementing a feature to limit the number of parallel file uploads and learned to debug **multithreaded** applications (semaphores, locks, event handling).
- Improved coverage by writing unit/integration **tests**. Learned to debug functional tests that run in Docker Compose and Publish-Subscribe **message queues** (Azure Service Bus, Jest, Enzyme, xUnit).

**Concordia University** – Montreal, QC.

Jan 2021 – Apr 2021

### CS Teaching Assistant

- Prepared and conducted weekly tutorials for over 30 students in the course **Object-Oriented Programming II (Java)**.
- Learned to better explain technical concepts, gave detailed feedback and received a **98% rating** from my students.
- Recorded my live sessions and uploaded them to YouTube to help all future students (>500 views).

## Projects & Extracurricular

**r/WallStreetBets DD Recommender** – [GitHub](#)

Jan 2021 – Now

- Creating a website to make the access to stock research easier. Aimed to help busy retail investors quickly filter out the best stock trends. Currently gathered over **50 sign ups** through the [landing page](#) built with Google Firebase.
- Preprocessed large amounts of data after retrieving them with the Reddit API and labelled the data with the growth percentage of a stock associated with each post (**Python, Spark RDD/DataFrame, SparkNLP**).
- Trained a model with the Naïve-Bayes algorithm which can detect if a reddit stock post is good or bad with 70% accuracy. It proved good enough to be used as a recommender (**scikit-learn**).

**Online Grocery Store** – [Website](#)

Jun 2021 – Aug 2021

- Led team of 6: organized meetings, delegated tasks, helped teammates debug, etc., leading to a final grade of **100%**.
- Implemented the entire login system to allow **CRUD** operations on the user list (**JavaScript, PHP, MySQL, HTML, CSS**).
- Designed the overall website concept/layout, implemented responsive home & product pages and deployed on Heroku.

**Software Engineering and Computer Science Society, VP Academic**

May 2020 – May 2021

- Initiated a YouTube Channel to deliver various technical workshops to over 1000 students and successfully recruited 5 companies (e.g.: Google, Shopify, Autodesk) to participate in our events and provide sponsorships (200\$+).
- Led 2 directors, helped them onboard with the team and taught them how to reach out to companies.

## Skills

**Programming:** Java, JavaScript/TypeScript, Python, C#, C++, PHP, SQL

**Other:** Git, ReactJS, Redux/Flux, Angular, HTML, CSS/Bootstrap, Django, Jest, Apache Spark, scikit-learn, Azure, Microservices