

# Yu-Ming (Alex) Chen

Computing and Financial Management | CFA Program Candidate  
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## EXPERIENCE

### DBRS Inc.

#### SOFTWARE ENGINEER

- Created high-performance tools with **AngularJS**, **C#**, **RabbitMQ**, and **MongoDB** that allowed **1k+ analysts** to accelerate process of financial rating
- Built a **ETL pipeline** in **Python** to extract data from **Contentful API** and **Amazon S3** to **Elasticsearch** used by DBRS.com search engine in **Node.js**
- Developed document generation service in **C#** that converted entity objects in **JSON/XML** to various reporting documents

### Ashlin-BPG Marketing Inc.

#### ECOMMERCE DEVELOPER

- Built a **multi-threaded** EDI process in **C#** that centralized orders from ecommerce platforms and reduced order processing time
- Architected a **C#.NET** desktop application for **ecommerce team** to manage product design, SKU code, and barcode generation
- Migrated existing server and data to **MS Azure** allowing business expansion overseas

### BDO Canada

#### SOLUTION CONSULTANT

- Interacted with various **stakeholders** and engineers to ensure software **quality**, **performance**, and on-time delivery of project
- Implemented **SQL store proc** that resolved the discrepancies between mock-up data with client's real data to ensure reliability of data for **QAs**

### Visual Photonics Epitaxy Co., Ltd (Public)

#### SOFTWARE DEVELOPER

- Created an **Intranet** application with **JavaScript**, **Bootstrap**, and **ASP.NET** used by **300+ employees** to publish internal news, schedule meeting, and request IT maintenance
- Assisted in building **predictive model** in **Python** to forecast company's wafer sales based on historical data and market demand with an accuracy of **90%**

May 2016 » Apr. 2017

"Alex showed high level of professionalism and dependability. He worked on couple of critical deliverables with tight deadlines, as well as took part in research of experimental modules for our platform. I had a chance to personally work on the project with Alex during our end of the term hackathon, and was impressed with his ability to research complex systems independently."

— AVP of Global Technology:  
Denys Besedynsky

Sep. 2015 » Dec. 2015

"Alex has been involved in creating a very complex web application for e-commerce.

He is very good at multi-tasking on various projects, and has been a great contributor to our ASHLIN team. The application that he has developed has an excellent user interface. He is always very thorough in creating it, and mindful of the user experience with it."

— VP of Ashlin-BPG Marketing:  
Juaane E. Kochhar

Jan. 2015 » Apr. 2015

"Alex displayed excellent work ethic, was punctual and well-organized in completed his tasks, and proactively sought feedback to improve the quality of his work. He was proactive in taking extra responsibilities to ensure deliverables are met."

— Manager of Solution Technology:  
Alex Ng

May 2014 » Aug. 2014

"Alex is a very positive and polite employee. He was able to participate and complete projects with high quality of code. Alex displayed his strong learning skills, as he was able to quickly pick up a new language and contribute to the team."

— Manager of Software Engineering:  
Alex Chuang

## PROJECTS

### Finalytics – Portfolio Platform [bit.ly/2hFpwK4](https://bit.ly/2hFpwK4)

Built an application with **Flask** to visualize and analyze equity data from **Yahoo Finance** and **BlackRock Aladdin API** on a dashboard and optimize portfolios using **SciPy**

### Supervised Breast Cancer Model [bit.ly/2mL3FGE](https://bit.ly/2mL3FGE)

Trained supervised model with University of Wisconsin Hospitals dataset using **SciKit-learn**, **NumPy**, and **Pandas** to diagnose patients with breast cancer with **97.5%** accuracy

### TMX Options Trading Simulation

Generated **15% return** on a portfolio of derivatives securities over **3 months** of timespan by applying Black-Scholes model and trading strategies such as butterfly spread, straddle, strangle, and hedging

## EDUCATION

### University of Waterloo

Bachelor of Computing and Financial Management, Honours Co-op Program

## COURSEWORK

### Undergraduate

Data Science for FinTech Applications  
Business Analytics  
Regression and Forecasting  
Fixed Income and Derivative Securities  
Equity Investments  
Micro and Macro Economics

### Online Studies

Machine Learning for Trading  
Full Stack Foundation

## SKILLS

### Languages

Python, C#, JavaScript, C++, Java, SQL

### Web Development

AngularJS, Node.js, Flask, MVC.NET, Entity Framework, MS Azure, AWS, RabbitMQ, MongoDB, Git

### Data Science

Scikit-learn, Pandas, NumPy, SciPy, Matplotlib, Tableau, R

## AWARDS

**Best Financial Hack and Best Data Visualization Hack**  
PennApps 2016

### University of Waterloo

**President's Scholarship**  
University of Waterloo

### BC Senior Performing Arts

**Provincials in Violin**  
Performing Arts BC

### BC AA Senior Tennis

**Provincials**  
BC School Sports

## INTERESTS

Basketball, Tennis, Violin, Photography

## REFEERENCES

Available Upon Request