

## EDUCATION

### UNIVERSITY OF WATERLOO MMATH THESIS IN COMPUTER SCIENCE

Conc. in Software Engineering  
Guide: Prof. Paulo Alencar  
Waterloo, ON | CGPA : 87%  
Sep'14 - May'17

### DELHI TECHNOLOGICAL UNIVERSITY

(Delhi College of Engineering)  
B.TECH ENGINEERING PHYSICS  
Conc. in Robotics & Information  
Systems  
New Delhi, India  
May'09 - Sep'14

## LINKS

Github:// [github.com/zxingz](https://github.com/zxingz)  
LinkedIn:// [linkedin.com/in/zxingz](https://linkedin.com/in/zxingz)

## COURSEWORK

### GRADUATE

Applied Machine Learning  
Multi-Agent Systems  
Database Management Use  
Big Data Software Engineering  
Software Requirements Specs

## SKILLS

### PROGRAMMING

Over 10000 lines:  
Python • Java • C++/C  
Familiar:  
Shell • JavaScript • MATLAB • R  
• node.js • Android • C#

### DATABASE

Actively Used:  
SQLite • MySQL • MS SQLServer •  
Oracle 12  
Familiar:  
MongoDB • PostgreSQL

### DEVELOPMENT TOOLS

Apache Airflow • Jenkins • Docker  
• Git • SVN

### ENVIRONMENTS

Solaris • LinuxMint • Ubuntu • Windows  
• Hadoop HDFS

## EXPERIENCE

### SCOTIABANK | PROGRAMMER ANALYST (CENTRALIZED RISK PLATFORM)

July 2017 – Present | Toronto, ON

- Deployed Apache Airflow for RMIT Risk Warehouse on Production environment with 80+ DAGs.
- Deployed Elasticsearch and Filebeat for log analysis.
- Working towards deploying monitoring stack (Prometheus, Grafana, CAdvisor, NodeExporter) using Docker.

### ERNST & YOUNG L.L.P | ASSOCIATE CONSULTANT IT

June 2013 – July 2014 | New Delhi, India

- Develop Design UI and Logic using SAP Advanced Business Application Programming. Customize and Develop Data Report and Form Generation.

### SCOTIABANK | INTERN (EQUITY TRADING & ELECTRONIC EXECUTION SERVICES)

May 2016 – August 2016 | Toronto, ON

- Instant Chat using Socket.IO, Email reporting/tracking server, Trading performance report.

### GAMEZOP.COM | DATA SCIENCE INTERN

January 2016 – April 2016 | New Delhi, India

- Developed Friends Recommender System and Game Recommender System on Google Compute Engine using Scikit-Learn and NetworkX python libraries.

### UNIVERSITY OF WATERLOO | TEACHING ASSISTANT

September 2014 – December 2016 | Waterloo, ON

- CS 246-Object-Oriented Software Development(C++ UML)
- CS 116-Introduction to Computer Science 2(Python)

### SAMSUNG R&D LAB | INTERN (DATA ANALYTICS GROUP)

May 2013 – June 2013 | New Delhi, India

- Extraction of movie trailer links from MovieLens data sets. UI for Samsung Smart TV gesture recognition Application.

## PROJECTS

### SCORE PREDICTION OF NBA PLAYERS FOR DRAFTKINGS FANDUEL

Predicted score for a player using Random Forest algorithm. Optimized line-ups using the predicted scores for daily fantasy sports websites.

### REVIEW OF GAME THEORETIC STRATEGIES AND MACHINE LEARNING ALGORITHM FOR AN ONLINE MULTIPLAYER REVERSI GAME PLAYING AGENT | UW CS886 MULTI-AGENT SYSTEMS

Primarily focused on the mini-max technique and on the use of a machine learning agent trained using a database of the championship games.

### HIGH FREQUENCY TRADING BY TRANSIENT PROFIT PEAK CLASSIFICATION USING MACHINE LEARNING ON REAL-TIME DATA STREAMS | UW CS886 APPLIED MACHINE LEARNING

Developed a transient profit peak classification algorithm combined with a classifier expansion mechanism to take advantage of the volatility in the stock markets by classifying a data point as a buying point (BP), selling point (SP) or as a do-nothing point (DN).