**Experience**

**Software Engineer** – Business Intelligence, AchieversMay. 2019 – Present

* **Team lead** of awarded project: Created comments **keywords** **insights** system highlighting **Date**, **Name** and **Event** using **Named Entity Recognition, Spacy, NLTK** and relevant **NLP** technique
* Maintains the data warehouse **ETL** daily reporting workflow that processes **0**.**15 TB current and historical data** daily with **advanced Postgresql** (100+ lines of code, 20+ columns, 5+ joins and coalesce per query script) and **Centerprice** data integrator
* Developed new data warehouse ETL pipeline with **Python**, **Spark** and **Airflow**
* Created user connectivity **Network Graph** for member in social network for **user influence Perdition** and analysis using **Python**, **Networkx** and **Pyvis**

**Research Assistant,** University of WaterlooDec. 2017 – Sep. 2019

* First author and **Team lead**: Created **NLP-based** Automated Bug **Prediction** andRepairModel with **240%** accuracy improvement Compare to the **state-of-the-art** tool on Quixbugs benchmark using **Pytorch**, **Python, Deep Learning** and **NLP**
* **Deployed** my research model to **Linux** **production** server with **4 GPU** and **128 CPU** and **24/7 high availability** and **Task scheduling** that runs critical tasks with an average of **72 hours** execution time.
* Created road slippage **Prediction** **model** with **81%** accuracy using **VGG16** model**, Computer Vision** Algorithm and **OpenCV**

**Awards**

* **Best Hackathon Project** Award at **Achievers**: ML-based Recommender system Jan 2020
* **Full Scholarships** for Uwaterloo MASc. Software Engineering program Jan 2019
* **Top 4%** out of **100** participants for **MNIST** digits recognition challenge with **98.8%** model accuracy using fine-tuned **K-means** model May 2018
* **Winner of** the Twitter **NLP** **sentiment analysis** contest at UOttawa for **highest model accuracy** out of **70** participants Sep 2016

**Education**

* **University of Waterloo**, Research Master of Software Engineering **Dec 2017 – Sep 2019**
* **University of Ottawa**, Bachelor of Computer Science, Horner with Co-op **Sep 2012 – Dec 2016**

**Publications**

* Abstraction Mechanism on Neural Machine Translation Models for Automated Program Repair

Author: Moshi Wei, Lin Tan **Sep 23rd 2019**

* Ensemble Learning using Convolution Neural Machine Translation for Automatic Program repair

Author: Thibaud Lutellier, Lawrence Pang, Viet Hung Pham, Moshi Wei, Lin Tan **Jun 20th 2018**