



# CHENG YUSHUN

## SUMMARY OF SKILLS AND QUALIFICATIONS

**Applications** | Microsoft Office • Eclipse • Pycharm • MySQL • Sublime Text • PhpStorm • SAS • XAMPP • Tableau  
**Programming** | Java • Python • SQL • SAS • LaTeX • JavaScript • PHP • HTML • CSS • UML • Ruby • C • LISP • Prolog  
**Languages** | English - Bilingual/Native • Chinese - Bilingual/Native • French - Elementary  
**Designation** | Associate Information Technology Professional (AITP)

## EDUCATION

### Master of Data Science – Computational Linguistics

Sep 2023 – Now

The University of British Columbia, Vancouver, BC, Canada

- GPA 90%
- Recipient of MDS International Entrance scholarship
- Member of CIPS - Canada's Association of Information Technology Professionals
- Relevant Courses: Computational Semantics, Machine Translation, Corpus Linguistics, LRL NLP, Database, etc.

### Bachelor of Computer Science – Honours Information Systems Co-op

Jan 2018 – May 2022

Concordia University, Montreal, QC, Canada

- Graduated with Distinction
- FGGPA 3.61/4.30, The Last Year CGPA 4.14/4.30
- Recipient of Dean's List Award
- Relevant Courses: AI, Data Structure and Algorithm, Calculus, Linear Algebra, Probability and Statistics, etc.

## EXPERIENCE

### Developer, Data Science & Data Engineering

Jul 2022 – Now

Bell Canada, Montreal, QC, Canada

- Leveraging sophisticated analytical techniques including text mining, neural networks, segmentation.
- Exploring large, new sources of data; communicate and present insights to business teams for decision making.
- Taking part in defining and improving the overall architecture to create effective enterprise-level data solutions.

**Core Competencies:** Big data, data analysis, communication, teamwork, decision-making

### Research Assistant

Jan 2022 – Jul 2022

Concordia University, Montreal, QC, Canada

- Working on the NLP related research projects at CLaC lab under the supervision of Professor Leila Kosseim.
- Attending weekly meetings to present the research process and obtain feedback.
- Conducting experiments and documentation.

**Core Competencies:** Communication, data analysis, teamwork, research paper writing

### Systems Integrator

Aug 2021 – Dec 2021

General Electric, Brossard, QC, Canada

- Consolidating the information from different sources automatically.
- Providing insights to decision making process.
- Creating dashboards and interfaces.

**Core Competencies:** Data visualization, communication, data collection, data analysis, teamwork, object-oriented

### Product Development Engineer Intern

Sep 2020 – Apr 2021

Fonex Data Systems Inc., St-Laurent, QC, Canada

- Data analysis to support the purchase team.
- Hardware & software testing.
- Webpage improving.

**Core Competencies:** Oral and written communication, decision-making, teamwork, problem-solving



## PUBLICATION

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**Automatic Identification of Chinese Paired Discourse Connectives** **2023**  
17th IEEE International Conference on Semantic Computing, Laguna Hills, California, USA

## PROJECTS/RESEARCHS

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**Leveraging NLP to Improve Sales Performance** **2022**  
Bell Canada, Montreal, QC, Canada

- Developed a real-time model to recommend products based on customers' possibility of purchase(Pbuy).
- Applied Electra to generate Pbuy, TestRank to extract keywords.
- Processed dialog transcriptions between customers and agents on GCP.

**Core competencies:** decision making, team working, presentation, NLP

**Research of Paired Discourse Connectives** **2022**  
Concordia University, Montreal, QC, Canada

- Developed a classifier identifying Chinese paired discourse connectives in CDTB with a 77.8% F-score.
- Applied Machine Learning: Decision Tree, SVM, MLP, Random Forest, BERT.
- Applied Hypothesis Test: t-test, and Chi-square test.
- Applied Chinese word embedding, and annotation, Cohen kappa coefficient.

**Core Competencies:** data analysis, statistics, team working, paper writing, NLP

**Working Hours Analysis** **2021**  
General Electric, Brossard, QC, Canada

- Developed an automatically updated dashboard which visualized data of time distributed in projects, employees, months, types of hours and other elements after merged raw data from SAP and mapping information from other sources.
- Data integration using Dataiku with SQL.
- Data visualization using Tableau.

**Core Competencies:** database management, data virtualization, presentation

**Vocabulary Processing** **2020**  
Concordia University, Montreal, QC, Canada

- Developed a program which generates a training model by analyzing vocabularies of sentences from four different classes and classifies a new set of sentences based on different requirements.
- Implemented Smoothed Conditional Probability.
- Implemented Naïve Bayes Classifier.

**Core Competencies:** data analysis, statistics, ML, NLP

**Web Career Portal** **2020**  
Concordia University, Montreal, QC, Canada

- Developed a system which allows recruiters to post job and job seekers to search and apply for jobs.
- Implemented E/R diagram, relational database schema.
- Programmed in SQL with MySQL.

**Core competencies:** database management, data collection, data analysis, engineering writing

**Montreal Crime Analytics** **2020**  
Concordia University, Montreal, QC, Canada

- Developed a program to identify the best route between two points avoiding high crime blocks.
- Python semantics, syntax, libraries, design heuristic search algorithms.
- Implemented A\* heuristic search algorithm.

**Core Competencies:** data analysis, statistics, ML