# **Haejin Cho**

(438) 722-0368 | haejin2909@gmail.com | https://www.linkedin.com/in/haejin-cho-220a3a1b2/ | https://jinjin-tonic.github.io/ | Piano & Video game & Travel | Montreal, QC

#### **EDUCATION**

# **University of British Columbia**

Vancouver, BC

Master of Data Science - Computational Linguistics

**E**XPECTED 07/2021

Relevant Coursework: NLP; Machine Learning; Deep Learning; Corpus Linguistics; Algorithms; Statistics

**Yonsei University** Seoul, South Korea

Bachelor of Arts - Korean Language and Literature

**G**RADUATED 08/2019

GPA: 4.22/4.3; Highest Honours 2018, 2019;

Relevant Coursework: Syntax; Semantics; Phonology; Morphology; Corpus Linguistics

#### **EXPERIENCE**

SeaSalt.aiVancouver, BCCapstone member05/2021 – 07/2021

• Capstone project as a part of the MDS-CL program

Advanced skills: To be added

## **Yonsei Institute of Language and Information Studies**

Seoul, South Korea

Research Associate

03/2016 - 09/2017

- Participated in publishing the 8th edition of Dong-a Yonsei's Elementary Korean Dictionary
- Analyzed vocabulary frequency used in elementary textbooks to select lexical items for the dictionary
  Advanced skills: Lexicology, Corpus linguistics, MS excel

## MKLCC(Montreal Korean Language & Culture Centre)

Montreal, QC

Volunteer, organizer

02/2019 – 05/2019

- Organized language exchange workshops and helped people to learn Korean and explore Korean cultures
- Filmed and edited workshop videos and uploaded to FaceBook group

## **PERSONAL PROJECT**

#### COVID-19 Vaccine Sentiment Analysis [Project Link] [GitHub]

12/2020-02/2021

- Achieved an accuracy of 78% with the best model among the trials of different machine learning models such as LGBM, Logistic Regression, XGBoost and deep learning architectures.
- Deployed an LSTM deep learning model to predict sentiments of COVID-19 vaccines related tweets using Heroku and Flask
- Scraped tweets using Tweepy API, manually annotated sentiments of tweets to perform a supervised learning task

Advanced skills: FNN, LSTM, PyTorch, Tweepy, Sentiment Analysis, Text Annotation, Flask, Heroku

#### ACADEMIC PROJECTS MORE PROJECTS ON MY BLOG

#### **Building a Multilingual Parallel Corpus using TED transcripts**

03/2021

- Scraped transcripts from TED talks to create a parallel multilingual corpus using BeautifulSoup
- Using spaCy, automatically extracted named entities in English, Chinese corpora and improved annotation quality by using Amazon Mechanical Turk
- Deployed the parallel corpora with an interface for users using HTML, JS, CSS, and FastAPI
  Advanced skills: Web Scraping, Python, Corpus Linguistics, spaCy, NER, AMT, FastAPI, Docker, Git

# Creating a POS tagger using HMM algorithm

01/2021

- Implemented a semi-supervised POS tagger from scratch using HMM and Viterbi algorithm, achieved 79 % accuracy
- Visualized the result statistics with a bar chart using Altair
  Advanced skills: Semi-supervised Learning, HMM, Viterbi, Python, POS tagging

# **ADDITIONAL INFORMATION**

- Technical Skills: Python, Git, R, PyTorch, Pandas, Altair, nltk, spaCy, MS Excel
- Languages: Fluent in Korean, English; Conversational Proficiency in Japanese; Elementary Proficiency in French
- Extra Accredited Courses: Linear Algebra, Introduction to Calculus at Athabasca University
- Online Courses and Certificates: Japanese Language Proficiency Test N1