

# Amanda J. Cheney, Ph.D.

## Data Scientist

✉ amanda.j.cheney@gmail.com  
🌐 amandajcheney.com  
📍 Vancouver, Canada  
in amandajcheney 📱 ajc356

## Education

### Cornell University

Ph.D. Government 2017

M.A. Government 2014

Fields: International Relations,  
Comparative Politics

### State University of New York at New Paltz

B.A. International Relations 2008

summa cum laude

Minors in Asian Studies and  
Mathematics

### National Taiwan Normal University, Mandarin Training Center

Certificate Mandarin Chinese

2010

## Skills

### PROGRAMMING LANGUAGES

Python

SQL

Git

HTML/ CSS

### LIBRARIES

Pandas

NumPy

Scikit-Learn

SpaCy

Gensim

Beautiful Soup

Selenium

VADER

FastText

### VISUALIZATIONS

Matplotlib

Seaborn

Tableau

Plotly

### MACHINE LEARNING ALGORITHMS

Regression

Classification

Clustering

Dimensionality Reduction

Natural Language Processing

Transfer Learning

Unsupervised Learning

Neural Networks

### CLOUD COMPUTING

Google Cloud Platform

### FOREIGN LANGUAGES

Mandarin Chinese - professional  
proficiency reading, writing and speaking

Classical (literary) Chinese - advanced  
reading proficiency

## Experience

### Metis

Data Scientist

Sept. 2020 to Current

Designed and executed five end-to-end machine learning projects during 12 weeks of immersive training in data mining, analysis, and machine learning.

#### PROJECTS

##### *Canada's Response to Economic Impacts of COVID-19*

- Deep learning & natural language processing to identify clusters of Twitter conversations about Canadian government financial aid programs during the pandemic. Findings show wide public support, point to the programs' indispensability and reflect Canadian political culture.

- **Tools:** Transfer learning from Godin 2019 Twitter embeddings library, FastText to create document embeddings, K-Means and HDBSCAN to identify clusters, VADER for sentiment analysis, EDA and visualizations using Matplotlib, Seaborn and Yellowbrick.

##### *Actionable Insights from Lululemon Product Reviews*

- Natural language processing & unsupervised learning exploration of customer reviews of Lululemon's best-selling sports bras. Findings indicate reviews generally concerned with 6 unique topics. Created a streamlit app to curate reviews for customer product needs.

- **Tools:** topic modeling with LDA, LSA, NMF; visualization of topic similarity with t-SNE, NLP preprocessing (TFIDF, CV, Spacy), web scraping with Selenium, Streamlit.

##### *Deadly Police Encounters*

- Built a classification model to identify where deadly police encounters are likely to happen based on socio-economic characteristics of the communities in which they occur and created an interactive map of the United States to visualize their geographic spread.

- **Tools:** Classification Algorithms (Logistic Reg, KNN, Random Forest, Naive Bayes, Support Vector Classifier), ROC-AUC Curves, Sci-kit Learn, Tableau.

##### *Chinese Box Office Success:*

- Used linear regression to determine features of films that lead to commercial success in the Chinese market and applied model to all films released in China from 2016-2019 to predict what films were most likely to have highest revenue.

- **Tools:** Linear Regression, Webscraping with Beautiful Soup, Python, Pandas, Statsmodels OLS, LassoCV, Matplotlib, Seaborn.

### Norwegian Institute of International Affairs

International Affairs Analyst & Consultant

Oslo, Norway (remote)

Dec. 2019 to Current

- Leverage superior knowledge of Chinese diplomatic history and Mandarin language skills to provide insight into China's role in shaping the modern international order

- Collaborate with team of 12 international experts to identify and investigate taken-for-granted concepts in international politics to write a new conceptual history of international relations

- Team awarded \$1.1 million USD by the Research Council of Norway

### Swedish Institute of International Affairs

Member of the Stockholm Observatory for Global China

Stockholm, Sweden (remote)

May 2019 to Current

- Promote knowledge sharing about China's global ambitions and their implications for Swedish foreign policy across academia, government, civil society and business sectors

- Participated in panel discussions on China's Global Role in the Covid-19 Crisis and the Belt and Road Initiative for audiences of 150-200 diplomats, academics, business-people and journalists

- Interviewed on film providing analysis of China's intentions to change the international order for the Global China Interview Series

### Lund University

Postdoctoral Researcher

Lund, Sweden

Aug. 2017 to Aug. 2020

- Managed multiple lines of independently designed social science research projects on China's foreign policy, Tibet, the South China Sea and systemic global change

- Collaborated with 3 senior level colleagues to secure \$1.8 million USD from the Bank of Sweden Tercentenary Foundation

- Authored 6 original articles averaging 8,000 words each, 3 published as working papers

- Presented research findings at 4 invited lectures, 5 invited workshops and 5 international conferences

- Co-organized and planned 60-person international conference at Lund in June 2020 (postponed due to COVID-19)

- Awarded 2018 prize for Best Paper in Historical International Relations presented by a Graduate Student at the 2017 International Studies Association Annual Meeting (most respected and widely known scholarly association in International Relations)

### Course Coordinator & Instructor

Nov. 2017 to May 2019

- Managed team of 3 co-teachers, designed and taught graduate-level course of 14 students

- Co-taught undergraduate course of 15 students

- Prepared lectures, managed student discussions, provided students with progress reports and extensive written feedback

- Advised late-stage PhD student and evaluated 200-page doctoral dissertation manuscript

### Podcast Host & Producer

Sept. 2017 to Mar. 2018

- Created podcast series 'Whose International Relations' to accompany and enhance student engagement with co-taught undergraduate course

- Organized, produced and recorded interviews with internationally recognized experts on relevant course topics

- Edited audio files to create 7 episodes ranging from 23-47 minutes

### Cornell University

Ph.D. Researcher

Ithaca, New York, USA

Aug. 2010 to Aug. 2017

- Employed training in research design and methodology to conduct state-of-the field analyses, identify avenues of research and independently design new studies to address them

- Located, digitized, systematically managed and analyzed thousands of Chinese and English language diplomatic documents collected from sources in China (PRC), India, Taiwan (ROC) and the UK during 15 months of fieldwork

- Synthesized data to produce reports including 200-page PhD dissertation and presented research findings at 10 international meetings and 1 invited public lecture

- Published peer-reviewed article at leading journal on contemporary Chinese affairs cited by at least 13 other peer-reviewed publications

- Led organization of 5 panels at international conferences

- Awarded grants including US Department of Education Foreign Language and Area Studies Fellowship (\$22,000 USD); Einaudi International

Research Travel Grant (\$4,600); Lam Family Award for Research in South China (\$4,500); Cornell Graduate School Research Travel Grant (\$2,000);

Lee Teng Hui Fellowship in World Affairs (\$12,500); C.V. Starr Fellowship in East Asian Studies (\$12,500)

### Teaching Assistant

- Assisted faculty members in teaching 6 Cornell undergraduate courses ranging in size from 18-200 students with classroom instruction, exam creation, grading and record keeping

- Prepared lectures, organized and led discussion sections for groups of 6-18 students

- Received excellent student evaluation scores averaging 4.41/5

- Served as editor of student run peer-reviewed journal Cornell International Affairs Review

### Teton Science Schools

Advancement Associate

Jackson Hole, Wyoming, USA

July 2008 to Aug. 2009, May 2010 to Aug. 2010

- Cultivated donor relations and business partnerships

- Managed logistics of the organization's largest fundraising event and met fundraising goals of \$250,000 despite the global financial crisis

- Edited online weekly journal and contributed to brand awareness campaigns in traditional and social media outlets