

James “Jamie” Scharf

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EDUCATION & Qualifications

Clearance: Secret

The Johns Hopkins University – Baltimore, MD

Expected May 2022

- Master of Science in Engineering, Computer Science

The Johns Hopkins University – Baltimore, MD

May 2021

- Bachelor of Arts, Political Science; Minor, Computer Science
- Coursework in natural language processing, artificial intelligence, and parallel programming
- **GPA:** 3.56 (General Honors)

Experience with the following programming languages: Python, C/C++, Java, Go, JavaScript

RECENT PUBLICATIONS & PRESENTATIONS

Arya D. McCarthy, **James A. Scharf** and Giovanna MD Dore, “Two Lenses on the Fragrant Harbour: Differences in Western and Hong Kong-based Reporting on the 2019-2020 Protests,” [LaTeX-CLfL Proceedings](#), 2021. [Pending Release]

Arya D. McCarthy, **James A. Scharf** and Giovanna MD Dore, “A Mixed-Methods Analysis of Western and Hong Kong-based Reporting on the 2019-2020 Protests,” [TADA](#), 2021.

James A. Scharf, Arya D. McCarthy and Giovanna MD Dore. “Evolution and Bias: News Portrayal of Civil Unrest in Hong Kong, 1998-2020,” [PaCSS](#), August 2021. Boston, U.S.A. (Virtual).

James A. Scharf, Arya D. McCarthy and Giovanna MD Dore. “Characterizing News Portrayal of Civil Unrest in Hong Kong, 1998-2020.” [CASE](#), August 2021. Bangkok, Thailand (Virtual).

EMPLOYMENT & RESEARCH EXPERIENCE

Joint MISO WebOps Center (JMWC), U.S. Special Operations Command – Tampa, FL

Summer 2021

Thesis Civic Digital Fellow, Data Science

- Created a multilingual in-house annotation platform for Named Entity Recognition (NER) and Text Classification with customized neural and non-neural models in the Huggingface Transformers, SpaCy, Scikit-Learn, and FlairNLP packages
- Bootstrapped ML models in 400 languages using word alignment and projection

Department of Computer Science, Johns Hopkins University – Baltimore, MD

Spring 2020 & Spring 2021

Head Course Assistant for Information Retrieval and Web Agents

- Assistant and grader for a course in machine learning, information extraction and web scraping
- Helped students with projects in sense disambiguation, word embeddings and vector models of information retrieval

Department of East Asian Studies, Johns Hopkins University – Baltimore, MD

Summer 2020 – Fall 2021

Computational Research Assistant for Dr. Giovanna Maria Dora Dore

- Built probabilistic models of 4000 news articles with the Causalnex and Scikit-Learn libraries
- Generated plots with Seaborn and Matplotlib to compare news coverage in Hong Kong by year

Center for Language and Speech Processing (CLSP), Johns Hopkins University – Baltimore, MD

Summer 2020

Intern for Dr. David Yarowsky's Low-Resource Languages Lab ([LoReLab](#))

- Utilized Facebook's Fairseq Sequence-to-Sequence (Seq2Seq) library for G2P tasks
- Scraped and parsed foreign language webpages into structured data with Pandas, Selenium and BeautifulSoup

Department of Political Science, Johns Hopkins University – Baltimore, MD

September 2018 – October 2019

Research Assistant for Prof. Adam Sheingate

- Used Python and R to analyze F.E.C. data related to elections from 2010 to 2016
- Built a natural language classifier using the Scikit-learn machine learning framework, pattern matching and query-expansion

ODN (formerly Open Data Nation) – New York, NY

Summer 2019

Data Science Intern

- Programmed statistical analyses of roadway and car crash data with Pandas and Scikit-learn
- Cleaned and prepared geospatial datasets for machine learning models