James "Jamie" Scharf

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SKILLS & QUALIFICATIONS

Clearance: Secret
Programming Languages*:* Python, C/C++, Java, Go, JavaScript, HTML, Bash/Unix
Toolkits: Scikit-Learn, PyTorch, SpaCy, FlairNLP, PySpark, Dask, Matplotlib, OpenNMT, Huggingface Transformers

EMPLOYMENT & RESEARCH EXPERIENCE

Joint MISO WebOps Center (JMWC), U.S. Special Operations Command – Tampa, FL *Summer 2021*
Telesis 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 with 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

EDUCATION

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, machine translation, and parallel programming
- **GPA:** 3.56 (General Honors)

RECENT PUBLICATIONS & PRESENTATIONS

McCarthy, **Scharf**, Dore. "Characterizing News Portrayal of Civil Unrest in Hong Kong 2019-2020," MPSA, April 2022 [Forthcoming].

McCarthy, **Scharf**, Dore. "A Mixed-Methods Analysis of Western and Hong Kong-based Reporting on the 2019-2020 Protests," *LaTeCH-CLfL Proceedings*, November 2021.

Scharf, McCarthy, Dore. "Evolution and Bias: News Portrayal of Civil Unrest in Hong Kong, 1998-2020," *PaCSS*, August 2021.

Scharf, McCarthy, Dore. "Characterizing News Portrayal of Civil Unrest in Hong Kong, 1998-2020." *CASE*, August 2021.