Timothy Schott

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Education

University of California, Berkeley 2023
Master of Information Management Systems; concentration in Data Science
Teaching Assistant: Natural Language Processing

University of Virginia 2019
Bachelor of Arts, Computer Science and Bachelor of Arts, English with High Distinction

Professional Experience

Software Engineer, Client Services Reston, VA
Brightspot Intern Summer 2018; Full-time 2019 – 2021

- Performed object-oriented data modeling, data engineering and CMS customizations in a cross-functional setting. Collaborated with creative staff to tailor features to business needs. Trained client developers to use Brightspot APIs.
- Produced a data ingestion framework for mattressfirm.com and sleep.com e-commerce products that automated the maintenance of a 5000-product inventory. Eliminated the need for editors to manually curate inventory.
- Delivered a cloud computing ETL Pipeline to Janes UK that transforms creative content into usable web data. Simplified creative workflows and enhanced visibility to editorial management. Increased janes.com publishing activity by 60%.
- Integrated the Apple News API into bcg.com's CMS and wrote documentation explaining how editors can syndicate to content Apple News. Differentiated Boston Consulting Group's mobile presence in the competitive landscape.

Projects

Details in the Novel 2021

- Analyzed details in fiction by capturing literary "specificity" and parts-of-speech tags with Python.
- Developed a random-sampling mechanism with R and bash scripts for double-blind corpus annotation. Wrote original guidelines for how to recognize details in fiction. Provided foundation for future studies to identify fictional details.
- Performed data visualization with R to distill insights to non-technical humanities audiences.
- Authored project report with LaTeX (in Association of Computational Linguistics format) towards goal of publishing work.

Supreme Court language model (timschott.com/sbotus) 2020

- Transformed data from Oyez API into an original corpus of Supreme Court opinions and associated oral arguments.
- Implemented Open AI's GPT-2 with Python (tensorflow) and fine-tuned a language model to generate original "opinions."
- Utilized Google Collab and GPU computing for experience with industry standards of neural network computing.

Twitter Bot (twitter.com/WashingtonBezos) 2020

- Leveraged Python and the News API to search every Washington Post article for mentions of Bezos' ownership.
- Tweeted over 350 relevant articles (and counting) using an automated Google Cloud Function and Twitter bot.
- Generated important conversations about best-practices for media editors. Afforded a historical record of the phenomenon.

Academic Experience

Analyzing the Lyrical Novel (Honors Thesis) Charlottesville, VA
Department of English 2018 – 2019

- Tokenized a 51 Novel corpus and committed each book's words, sentences and paragraphs to a SQL database.
- Engineered 31 original features and classified data using machine learning with R and Python.
- Incorporated practices from data science like cross-validation, hyperparameter tuning and model optimization.
- Selected as a presenter to showcase project at the 2019 University of Chicago Colloquium on Computer Science.

Research Assistant Charlottesville, VA
Institute for Advanced Technology in the Humanities 2016 – 2019

- Carried out data mining, data cleaning and data management as part of an interdisciplinary research group studying the history of Free Speech and the First Amendment through analysis of Supreme Court opinions.
- Ran regressions, supervised classifications, and hypothesis tests. Improved inferential statistics skills and data fluency.
- Gained experience explaining technical findings from data analysis to non-technical stakeholders.