Tim Schott

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Versatile Data Scientist passionate about translating complex data into actionable insights for decision–makers. Committed to fostering a culture of curiosity and delivering exceptional results.

WORK EXPERIENCE

Red Ventures • Charlotte, NC • Full-time 07/2023–present + Internship 06/2022–08/2022
Data Scientist, **Central Team**
- Engineered temporal user embeddings by employing recurrent neural networks (RNN) in PyTorch. These embeddings serve as input representations for over 30 downstream models, enhancing the accuracy of user behavior predictions. Wrote supporting Terraform configurations for easy use of embeddings in Databricks.
- Spearheaded a strategic initiative resulting in a $1M YoY revenue boost by architecting and deploying a point-of-sale fraud detection model via Spark, Python and MLFlow. Worked closely with product stakeholders from RV Home to ensure technical work was properly aligned with business goals.
- Enhanced our team's multi–armed bandit personalization service by integrating LLM word embeddings as context features. This change increased monetized asset CTR by 40%. Wrote engaging technical summary of project for company engineering Medium page that has received 500+ views and 50+ likes. [link]

Brightspot • Reston, VA • Full-time 06/2019–07/2021 + Internship 06/2018–08/2018
Software Engineer, Client Delivery Team
- 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. Taught client engineering teams how to use Brightspot APIs during open-door office hours.
- Delivered an ETL pipeline built with Java and MySQL for mattressfirm.com and sleep.com e-commerce products. This work greatly simplified publishing by automating the maintenance of a 5000+ product inventory. [link]

EDUCATION

Master of Information Management and Systems, Data Science concentration
University of California, Berkeley, School of Information • Berkeley, CA • 08/2021–05/2023
- Teaching: TA for Natural Language Processing, Spring 2022 + 2023. [syllabus]
- Research: Met weekly to discuss NLP projects and pedagogy with Professor David Bamman's doctoral advisees.

Bachelor of Arts with High Distinction in Computer Science and English
University of Virginia • Charlottesville, VA • 08/2015–05/2019
- Michael Wagenheim Award for Outstanding English Major (2019). [paper]
- Research: Analyzed Supreme Court data for Professor Jennifer Petersen [project]. Built a website exploring digital poetics for Professor Brad Pasanek using HTML, CSS and JavaScript. [project]

PUBLICATIONS

- First Author of "Polyglot or Not? Measuring Multilingual Encyclopedic Knowledge Retrieval from Foundation Language Models", published in *Empirical Methods in Natural Language Processing, 2023*. [paper] [code]

PROJECTS

Detail in the Novel • Fall 2022
- Combined literary studies with methods from NLP. Concluded that prepositions are highly associated with detailed modes of writing via chi-squared significance testing. Trained a BERT classifier and visualized its attention weights using PyTorch to reinforce findings. [paper] [code]

SERVICE

Rockbridge Animal Alliance • Lexington, VA • Fall 2022- present
Webmaster
- Trained non-technical charity staff to use Google Sheets to track pet food distributions.
- Assist with week-to-week website troubleshooting and social media campaigns.

Boy Scouts of America, Troop 998 • Leesburg, VA • 2012
Eagle Scout