

Christopher Tran

Data Scientist, Securities and Exchange Commission
302.399.7334 | chris.l.tran.2016@gmail.com | [christran16.github.io](https://github.com/christran16)

EDUCATION

University of Illinois at Chicago

Ph.D. in Computer Science

Chicago, IL

Aug. 2016 – Aug. 2022

Delaware State University

B.S. in Computer Science and Mathematics

Dover, DE

Aug. 2012 – May 2016

EXPERIENCE

Data Scientist

July 2023 – Present

U.S. Securities and Exchange Commission

Washington, DC

- Served as the primary developer and subject matter expert for SMART, an agency-wide AI platform using AWS Bedrock (Llama, Claude, Nova) relied upon by 2,100+ users, leading enhancements across UI/UX, backend performance, model integrations, document analysis, RAG pipelines, citation systems, and multi-document workflows to ensure platform stability and high reliability.
- Built and deployed scalable multi-document querying and retrieval systems using hybrid RRF, vector search, BM25 ranking, and efficient ingestion, supporting complex document analysis, processing pipelines, and cross-document workflows with robust fallback modes.
- Developed and maintained an LLM evaluation framework and pipelines, conducting experimentation on various models and agent frameworks to assess summarization, extraction, reasoning, RAG performance, and cost metrics
- Optimized long-document Q&A via streaming generation, OCR fallbacks, and custom text extraction pipelines.
- Led contractors for AI and data science solutions, overseeing development, integration, and deployment of advanced technologies.
- Mentored and assigned tasks to interns and presented at internal AI/ML seminars.

Researcher

July 2022 – July 2023

Smart Information Flow Technologies (SIFT)

Minneapolis, MN

- Conduct independent and collaborative research on government contracts related to AI and ML
- Process, analyze, and visualize datasets to identify patterns and trends
- Applied data science and machine learning techniques to support program metrics
- Perform statistical and hypothesis testing to draw insights from data
- Received corporate recognition for research and implementation excellence
- Developed and implemented algorithms for novelty detection in unknown domains, improving novelty detection scores by 2x
- Built tools that automated and streamlined algorithm tuning, saving hours of manual work

Research Assistant

Aug. 2017 – May 2022

University of Illinois at Chicago

Chicago, IL

- Conduct literature reviews and stay current with advancements in causal inference and ML
- Collaborate with internal and external partners on multiple research projects
- Co-authored 10+ publications, including papers at top conferences (KDD, AAAI)
- Received research award recognizing exceptional promise and impact
- Led work that secured an Adobe Research grant
- Invited speaker at a conference workshop, highlighting contributions to the field

Research Intern

May 2019 – Nov. 2019

Smart Information Flow Technologies (SIFT)

Minneapolis, MN

- Model and identify factors contributing to gender bias across different countries
- Use data science and visualization tools to present findings to stakeholders
- Recognized as part of the Most Outstanding Team Award

TECHNICAL SKILLS

Languages: Python, SQL, TypeScript

Frameworks: React, Flask, PyTorch, LlamaIndex

Developer Tools: Git, Docker, AWS (Fargate, S3, Bedrock), VS Code

Libraries: pandas, NumPy, Matplotlib, scikit-learn