

AARON BREZEL

Computational Journalist & Software Engineer

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📍 New York, New York

🔗 <https://github.com/aaronbrezel/>

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JOURNALISM & ENGINEERING

The Brown Institute for Media Innovation

Lead Engineer for The Media and Community Lab

📅 Dec. 2024 — Present

📍 New York, New York

- Translating theories around media, social cohesion and democracy into practice with small-to-midsized newsrooms.
- Applying emergent AI design patterns for newsroom use. Built an "agentic RAG" system to deliver insights from journalism support network articles. Built a "model context protocol" server for LLM interoperability with the Census Bureau API.

The Washington Post

Reporting Tools Engineer 2

📅 June 2021 — Dec. 2024

📍 Washington, D.C.

- Pushed the boundaries of technology-assisted reporting as a founding member of the Reporting Tools team.
- Collaborated with the newsroom on both enterprise journalism and the creation of force-multiplying reporting tools.
- Daily responsibilities included full stack software engineering, product planning and technical meetings with journalists.
- Contributed to high-impact projects including the Peabody award-winning "Fatal Force" database on police killings, "Hot Topic" — a templated system for reporters to create cloud-hosted social media scrapers, and "Haystacker" — an AI-powered visual forensics tool.
- Developed practices for injecting journalistic rigor into the engineering process. Resulted in a unique team culture.

Consumer Reports

Researcher & Data Journalist

📅 Oct. 2020 — Summer 2021

📍 New York, New York

- Contributed to CR investigative report on Amazon warehousing impacts on environmental justice communities.
- Authored white paper on "participatory journalism." Interviewed academics, journalists and community organizers. Documented and codified strategies for reader engagement, newsroom partnerships and citizen science.

Tow Center for Digital Journalism

Adjunct Research Scholar

📅 March — May 2021

📍 New York, New York

- Developed cutting-edge computer vision software package for extracting tabular data from scanned IRS 990 forms.

Miami Herald

Investigations Team Intern

📅 Summer 2019

📍 Miami, Florida

- Three front page stories: expanded coverage of Jeffrey Epstein, FIU bridge collapse and Mar-a-Lago security probe.
- Published investigation into criminal connections and real estate fraud of Grenada's ambassador to Russia.

EDUCATION

Columbia University

M.S. in Journalism and M.S. in Computer Science

📅 Aug. 2018 – May 2020

📍 New York, New York

- One of six candidates following unique combined curriculum.
- **Journalism coursework:** reporting (Honors), narrative writing (Honors), computational journalism, news products
- **CS coursework:** artificial intelligence, natural language processing, SQL databases, deep learning and data visualizations, advanced software engineering, machine learning

Washington University in St. Louis

Major: Economics, Minors: Computer Science & Writing

📅 Aug. 2014 – May 2018

📍 St. Louis, Missouri

ACADEMIC PROJECTS

Memery: a master's thesis project

- Co-created platform to track the origin of memes in far-right internet communities. Awarded Brown/Tow Award for Excellence in Computational Journalism.
- Developed listener scripts to watch for new meme formats. Implementing pHash & DBSCAN clustering to allow users to search for similar images on web interface.

Autalog

- Designed and pitched machine learning-powered organization tool for journalists. Won \$10,000 grant to conduct user research and build technical prototype.

Analyzing protests on Reddit

- Developed breadth-first search algorithm for tracking social activity on Reddit radiating from "seed" posts.

Right to Counsel mapping & reporting package

- Used R and Mapbox JavaScript API for interactive map on eviction orders across New York City zip codes. Companion to reporting package on new legislation guaranteeing legal representation for low-income tenants facing eviction.

SKILLS

Frontend

- Typescript
- React
- Nextjs
- Storybook

Backend & DevOps

- AWS
- GCP
- Docker
- Python
- Serverless
- SQL
- Ruby On Rails
- Django
- Vector databases

Data, Design & AI

- Dagster
- Scikit-learn
- Figma
- LangChain
- Vertex AI
- LM Studio
- Smolagents