

Atilio Barreda II

data.atil.io | github.com/lolusername

BIO

Software engineer and data scientist building tools for visualization, analysis, and making complex information easier to explore.

SKILLS

Languages: Python, JavaScript, TypeScript, SQL

Databases: PostgreSQL, MongoDB

Frameworks & Tools: FastAPI, Svelte, Vue, Nuxt, Vite, Node.js, Express, HTML/CSS, Tailwind, Docker, Git, CLI, Elasticsearch, NumPy, Pandas, Matplotlib, D3.js

Cloud/Infra: AWS (ECS, S3, Lambda), Firebase, Netlify, MongoDB Atlas, Supabase

Other: Spanish, Adobe Creative Cloud (Photoshop, InDesign, Premiere Pro, Illustrator)

PROFESSIONAL EXPERIENCE

Adjunct Lecturer, Computer Systems Technology Dept., New York City College of Technology (CUNY) *Aug 2020 - Present*

- Designed and taught 5 distinct courses (Intro Data Science, Machine Learning Fundamentals, Database Administration, Intro to Computing, Intro to NoSQL).

Freelance Software Engineer, Studio Miski *Jan 2020 - Present*

- Launched a searchable email analysis platform for nonprofit D4BL (125K+ emails indexed), cutting data retrieval time from ~10 minutes to under 1 minute.
- Delivered interactive topic/entity visualizations and document-level annotations so researchers can validate hypotheses quickly and jump from patterns to source documents.
- Deployed a containerized production stack on AWS EC2 (Docker, Nginx).
- Delivered similar data-processing + visualization tools for nonprofits/academics.

Senior Software Engineer, Global Healthcare Exchange *Jun 2023 - Jun 2024*

- Developed and shipped interactive analytics dashboards using Vue.js with Django REST APIs, enabling stakeholders to explore key metrics in real time.
- Partnered with design and client stakeholders to prototype dashboards in 2-4 days, accelerating feedback loops and preventing wasted build time on unvalidated concepts.

Frontend Engineer, Calvin Klein *Jun 2019 - Jan 2020*

- Automated image-asset creation pipelines with JavaScript + Adobe InDesign scripting; reduced per-campaign production effort by 20%, saving 12 hours per campaign and freeing designers for higher-value art direction.

Frontend Engineer, Turbonomic *Jul 2017 - Jun 2019*

- Implemented a Git-based WordPress workflow on AWS (replacing direct FTP), enabling versioned rollbacks and cutting release cycles from hours to ~15 minutes.

User Interface Engineer, Sentient Jet *Jun 2015 - Jul 2017*

- Built internal flight-operations dashboards (flights scheduled vs. flown, empty legs, revenue) to consolidate key metrics in one interface, reducing reliance on multiple third-party tools

Freelance Web Developer & Designer *2012 - Jun 2015*

- Built static sites and WordPress themes for entrepreneurs/artists.

EDUCATION

MS in Data Analysis and Visualization

CUNY Graduate Center (2021-2025)

BA in Modern Culture and Media (Literary Theory & Digital Media Production)

Brown University (2008-2012)

PUBLICATIONS

Barreda II, A., C. Diaz Eaton, S. Hansen, J. E. Hibdon Jr., L. T. Gordon, R. Greenwald, M. J. Gutiérrez Paz, K. Ince, C. Kelling, A. Mendiible, J. Mercado, V. Piercey, and B. Thompson. "Community-Driven Data Science Practices." *La Matematica* (upcoming)