

Brenden Brusberg

Data Science Specialist

Jersey City, NJ, USA

📞 1-201-401-6723

✉ brenbrus@gmail.com

🌐 BrendenBrusberg.com

in brendends

🌐 brusberg

Summary

I operate at the crossroads of data science and software engineering, coordinating the development of Firmwide systems across multidisciplinary teams. With expertise in AI strategy, cloud infrastructure, and emerging technology, I leverage organizational data to inform strategic decisions that align leaders with their people to create a safer and more productive environment.

Work Experience

Data Science Specialist, McKinsey & Company, NYC, NY Jan 2024 – Current

- Architecting agentic AI systems with multi-step orchestration, tool-use design, and autonomous task execution, balancing AI autonomy with human oversight through agent guardrails and feedback mechanisms.
- Implementing LLM evaluation frameworks with PromptFoo, building CI/CD pipelines and dashboards for organization-wide red teaming, quality assurance, and democratized NLP through RAG.
- Designing deep learning architectures for novel Stochastic and Ordinal Differential Equation methods in Diffusion and Flow Matching, with custom FIDNet models for evaluating generative AI output.
- Owning full-stack workstreams across Python, Node.js, and AWS to ship agent-powered pipelines at Firm scale, from knowledge asset creation to structured content workflows.
- Defined a taxonomy of skills for recruitment, staffing, and analytics by constructing a knowledge graph leveraged by downstream services and teams.

Senior Data Scientist, McKinsey & Company, NYC, NY Dec 2021 – Dec 2023

- Designed topic modeling methods for millions of complex text documents over various data sources annually, including a weekly pulse to capture emerging topics and issues across the Firm.
- Enabled faster cross-team development with CI/CD pipelines in GitHub Actions and AWS CloudFormation, mitigating risk across our data and deployment layers.
- Led team deep-dives to implement new packages and papers, helped design the interview process, conducted interviews, and mentored two junior colleagues receiving promotions within a year of joining.

Data Scientist, McKinsey & Company, NYC, NY May 2019 – Dec 2021

- Developed production-grade ML analytic pipelines in Kedro that outperformed vendor model, saving the Firm over a million dollars annually.
- Transitioned our team's models to scalable AWS infrastructure, scaling to meet demand over 1.2 million times annually without error.
- Increased explainability of highly sensitive model inferences across the people space to improve decision-making impact.

Education

Master of Science, Machine Learning, Stevens Institute of Technology, *Hoboken, NJ* Dec 2021
GPA – 3.97

Bachelor of Science, Computer Science, Stevens Institute of Technology, *Hoboken, NJ* May 2021
GPA – 3.82, **Mathematics Minor, Literature Minor**

Software/Tools: Python, FastAPI, Kedro, TypeScript, Next.js, PromptFoo, Docker, AWS, Terraform, GitHub Actions