JANIA VANDEVOORDE

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EDUCATION

University of Michigan • Ann Arbor, MI — August 2025 – December 2026

Master of Science - Computer Science and Engineering — GPA: 3.8

Relevant Courses: NLP, Distributed Systems, Database Management Systems, Computer Architecture, Open Source Software in the Agentic Era, Information Retrieval, Parallel GPU Programming, Advanced Programming Languages, Advanced Cryptography

Brown University • Providence, RI — September 2021 – May 2025

Bachelor of Science - Computer Science & *Bachelor of Science - Statistics* — GPA: 4.0

Relevant Courses: Machine Learning, Deep Learning, Systems for ML, Computer Vision, Data Science, Applied Regression, Computer Systems, Algorithms, Theory of Computation

Head Teaching Assistant: Discrete Mathematics, Data Structures, Machine Learning

EXPERIENCE

Data Engineer Intern @ MongoDB (Data Pipelines) • New York, NY — June 2026 – August 2026

- Productionized a LangGraph-based agentic AI support system on AWS Bedrock AgentCore, integrating runbooks, Jira, GitHub PR creation, and reusable skills to automate incident triage and remediation workflows
- Designed and productionized Airflow backfill pipelines to ingest GitHub metrics for 25+ previously untracked organizations, improving dataset coverage by 20% through integrations with the GitHub REST API, AWS S3, and Trino
- Architected a greenfield ingestion pipeline for a marketing analytics platform, integrating GraphQL APIs into MongoDB's internal data lake and defining Iceberg table schemas with data quality maintenance

Software Engineer Intern @ MongoDB (Cloud Insights & Telemetry) • New York, NY — June 2025 – August 2025

- Developed an end-to-end framework to backfill historical hardware metrics for over 175,500+ customer clusters and 1B metric documents, enabling migration to a dedicated observability platform
- Implemented checkpointing and retry logic to reliably track progress and prevent data duplication across distributed jobs
- Expanded the metric ingestion API with a synchronous bulk endpoint, reducing per-request overhead and improving Prometheus-based observability

Research Assistant @ Brown University School of Public Health • Providence, RI — August 2024 – December 2024

- Developed a scalable discretization algorithm for data preprocessing, improving accuracy by 27% for risk score models for detecting tuberculosis treatment adherence among Peruvian adolescents
- Implemented randomized rounding in model initialization to enhance warm-start efficiency, reducing training time by 15%

Software Engineer Intern @ MongoDB (.NET/C# Driver) • New York, NY — June 2024 – August 2024

- Designed and implemented a system migrating query execution from client to server, improving performance by avoiding client-side memory limitations
- Enhanced MongoDB's .NET driver OData adapter using metaprogramming to support advanced filter queries

TECHNICAL PROJECTS

Complete projects available on my website.

infiniPods (TypeScript/Node.js) — September 2026 – Present

- Public registry for versioned, lineage-tracked AI agent packages, with GitHub-authenticated publishing, server-side upload validation, scoped agent tokens, and a searchable web UI with lineage visualization.

Text2ClasSQL (PyTorch) — October 2025 – December 2025

- Classification-based text-to-SQL system with schema-aware encoding and multi-head prediction over query clauses.

NeurANIL (PyTorch) — February 2025 – May 2025

- Deep learning model using meta-learning architectures to improve neural decoding on brain signals, outperforming benchmarked models (MLP, LSTM, Transformer, CRNN, Gaussian Naive Bayes) on 78% of test data.

TECHNICAL TOOLS & SKILLS

- **Programming Languages:** Python, Java, Go, R, C#, OCaml, C++, TypeScript
- **Technologies:** CUDA, Spark, Kubernetes, AWS, Docker, PyTorch, TensorFlow, scikit-learn
- **Global-minded:** traveled to 40+ countries, lived in 7 countries

ACCOMPLISHMENTS & AWARDS

NCAA Division I Women's Rugby Athlete, Brown University — September 2021 – May 2025

Scholastic All-American (2023, 2024), 7's National Champion (2023, 2024), Strength & Conditioning Athlete of the Year (2024)

Distinguished Senior Prize in Computer Science, Brown University — May 2025