

EXPERIENCE

Global Payments Inc., Atlanta, GA

Jun 2021 – Present

Head of Artificial Intelligence/Machine Learning (AI/ML) Engineering (Jun 2024 - Present)

- **Direct the Enterprise AI/ML Engineering Division**, reporting to the Chief Analytics Officer (CAO), managing an organization of 29 AI/ML professionals
- **Oversee an enterprise-wide AI/ML project portfolio** worth \$24MM annual recurring revenue (ARR)
- **Appointed to lead the AI/ML Engineering Division** during a critical digital transformation, tasked with overseeing all AI/ML engineering initiatives across the enterprise, driving AI adoption and innovation
- **Spearheading the first wave of enterprise-wide AI/ML projects** ranging from payments fraud detection solutions to commerce copilot agentic bots

Head of Data Solutions & Principal Data Scientist (Mar 2023 - Jun 2024)

- **Founded and directed the Data Solutions division**, reporting to the CTO, managing a 14-member team across Data Science, Data Engineering, Data Governance, and Business Intelligence Reporting
- **Delivered over 50 high-impact projects**, contributing to \$6MM in ARR, while driving data strategy and value across the business unit
- **Transformed Business Intelligence team operations** through Agile practices and scrum-based approach, modernizing over 80 on-prem SQL-based reports into Looker Cloud
- **Enabled business-wide data governance** by fostering collaboration with the enterprise data asset management team. Identified and remediated over 100 data risks, while also spearheading the creation of a data asset inventory and implementing a strategic data retention plan

Senior Data Scientist (Jun 2021 - Mar 2023)

- **Led AI/ML practice** for the Point of Sale business and was the primary consultant on all AI/ML activities company-wide
- **Launched predictive analytics products** in 8 countries, serving over 550,000 businesses with a model accuracy of over 97% - raking in an ARR of over \$2.6MM
- **Certified Federated Architect** for the business unit and was responsible for ensuring all net-new solutions adhere to enterprise information security standards and architecture standards
- **Served as the Chair for the Culture Committee (2022-2024)**, leading an 11-member steering committee to organize team events, lunch and learn sessions, improving our business eNPS score by 12 points in 2023

General Dynamics Information Technology, Atlanta, GA

Jan 2020 – Jun 2021

(Centers for Disease Control and Prevention Contract)

Senior Bioinformatics Engineer

- **Managed infrastructure issues** for applications/services on 100+ CentOS systems; installed and configured 150+ Unix-based applications
- **Automated Lightweight Directory Access Protocol (LDAP)** user onboarding, reducing process time by 18x, and deployed 50+ CRON jobs for system monitoring/alerts
- **Supported high-performance computing cluster** with 80+ nodes and 2000+ cores; improved job performance through user support and script customization
- **Led development of the Scientific Computing Team's intranet website** for hosting training content and user-guides; incorporated Google Analytics to inform data-driven training improvements.
- **Developed and presented** Python, Data Cleaning, Analysis, and Visualization training to 2200+ users and managed client support resolving over 1400 client tickets

Graduate Research Assistant

Supervisor: Joseph Lachance, Ph.D.

- **Developed STRUCTUREpainter**, a tool to estimate genome-wide human population-structure, optimizing data-processing parameters to speed up the process by 100%

PROGRAMMING LANGUAGES AND TECHNOLOGIES

- **Scripting Languages:** Python (highly proficient), Bash (highly proficient), R and JavaScript.
- **Cloud Computing Platforms:** GCP, Azure and AWS
- **Other Technologies:** Snowflake, Langchain, Haystack, Spark, UGE Cluster Computing, Airflow, Kubernetes, Tableau, Looker, HTML, D3.js, SQL, Jenkins, Web Servers (Apache, Nginx, Flask).

EDUCATION

Georgia Institute of Technology, Atlanta, GA

M.S., Bioinformatics

Manipal Institute of Technology, Manipal, India

B.Engg. in Biotechnology Engineering, Genetic Engineering minor

PUBLICATIONS

- Mathematical modeling of movement on fitness landscapes (2019): **Gerald, N.**, Dutta, D., Brajesh, R. G., Saini, S. (2019). Mathematical modeling of movement on fitness landscapes. BMC Systems Biology, 110. <https://doi.org/10.1186/s12918-019-0704-0>

HONORS AND AWARDS

- **Georgia Tech Computational Biology Faculty Research Awards** for the academic years 2018 and 2019

INTERESTS

- At-home tech projects (ask me about my soil moisture sensor and *Jeopardy!* game)
- Building AI tools for everyday use
- Brewing and beer-tasting
- Soccer (Played at the inter-collegiate level)