Matt **McGinnis**

SENIOR FULL STACK DEVELOPER WITH MCKINNEY

☐ (252) 489-9355 | ✉ mcginnisma90@gmail.com | in Matt McGinnis

Technical Skills

Languages	Python 3, SQL, Javascript, Bash/Shell
Frameworks	FastAPI, Flask, Vue, React, HTMX, Hyperscript
GCP	Artifact Registry, BigQuery, Cloud Build, Cloud Composer, Cloud Run, Compute Engine, Firebase, Firestore, Vertex AI
AWS	Bedrock, EC2, ECR, ECS, Fargate, OpenSearch, VPC/Networking
ML/AI Tools	LangGraph, LangChain, PyTorch, Tensorflow, scikit-learn, HuggingFace, MLFlow
Data Tools	Pandas, Polars, Apache Airflow, DuckDB, MongoDB, ChromaDB, Postgres, Snowflake, dbt
DevOps	Git, Docker, Terraform, GitHub Actions, Bitbucket Pipelines

Experience

McKinney   *Durham, NC*
SENIOR FULL STACK DEVELOPER   *May 2025 - Present*
FULL STACK DEVELOPER   *October 2022 - April 2025*
- Led design, development, and scaling of multiple production-grade ML/AI applications, including BrandAI, Creative Analysis Tool, Keyword Labeling & Categorization App and AudiencePro & MSAI feature integrations.
- Built and maintained backend systems, delivered low-latency inference services and developed robust API architectures using Python, FastAPI, Cloud Run, ECS/Fargate, OpenSearch, Postgres (pgvector), ChromaDB, and MongoDB.
- Developed RAG and LLM-driven workflows, including embedding pipelines, vector store implementations, multi-step agent systems (LangChain, LangGraph), and secure inference services using AWS Bedrock, Hugging Face and Vertex AI.
- Designed, trained, and deployed LoRA fine-tuned models (SDXL, Flux) using Vertex AI Pipelines, creating repeatable and scalable MLOps workflows with automated evaluation, model versioning, and MLflow tracking.
- Architected cloud infrastructure and implemented consistent, secure, cross-team cloud patterns using GCP (Cloud Run, Cloud Build, Composer, Vertex AI, IAM, Cloud Storage, Artifact Registry) and AWS (ECR, ECS/Fargate, EC2, VPC, IAM, Secrets Manager).

Travelers   *Raleigh, NC*
ASSOCIATE SOFTWARE ENGINEER   *June 2021 - October 2022*
- Developed and maintained the Bond Claim Management System and Letter Genie as a part of the Bond Claim and Specialty Insurance division.
- Development stack included VB.NET, C#, .NET, Javascript, Microsoft SQL Server, MongoDB, AWS and Git.

Farragut Systems   *Durham, NC*
SOFTWARE DEVELOPER I   *Nov. 2018 - June 2021*
- Maintained legacy desktop applications and built web applications from the ground up.
- Converted Matlab code to Azure Web App, refactored PA Compensation Rating Bureau financial reporting application with data migration, and optimized batch processing.
- Development stack included C#, .NET, Oracle SQL, Microsoft SQL Server, Docker, Azure, Git and Subversion

University of Delaware   *Newark, DE*
ADJUNCT PROFESSOR, INSTRUCTOR & TEACHING ASSISTANT   *Aug. 2013 - July 2018*
- Math 242: Analytic Geometry and Calculus B. Topics included exponential and logarithmic functions, sequences, series, integration techniques, parametric curves and polar coordinates.
- Math 241: Analytic Geometry and Calculus A. Topics included functions, limits, differentiation and integration.
- Math 230: Finite Mathematics with Applications. Topics included set theory, probability, optimization, linear programming and introductory matrix methods.
- Math 210: Discrete Mathematics I. Topics included set theory, logic, induction, counting, introductory graph theory and power series.

University of Delaware   *Newark, DE*
RESEARCH ASSISTANT   *Aug. 2013 - May 2018*
- Applied spectral graph theory to derive structural and combinatorial results from adjacency matrix eigenvalues.
- Developed Python tools to identify subgraphs with specific structural properties and published findings.

Certifications

Google Cloud Certified
PROFESSIONAL CLOUD ARCHITECT   *March 2025*

Amazon Web Services Certified
CLOUD PRACTITIONER   *June 2022*

Education

University of Delaware   *Newark, DE*
PH.D. & M.S. IN MATHEMATICS   *May 2013 - May 2018*

University of North Carolina Asheville   *Asheville, NC*
B.A. IN MATHEMATICS   *Aug. 2009 - May 2013*

Publications

- ***The smallest eigenvalues of Hamming graphs, Johnson graphs and other distance-regular graphs with classical parameters***
  A.E. Brouwer, S.M. Cioabă, F. Ihringer & M. McGinnis
  J. Combin. Theory Ser. B **133** (2018), 88–121

- ***Cospectral mates for the union of some graphs in the Johnson scheme***
  S.M. Cioabă, W.H. Haemers, T. Johnston & M. McGinnis
  Linear Algebra Appl. **539** (2018), 219–228

- ***Combinatorial and Spectral Properties of Graphs and Association Schemes***
  M. McGinnis *(Dissertation)*