

TYLER McGRAW

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I am a full-stack software engineer with several years of experience in the JavaScript and Python ecosystems. I recently co-created *Chunkwise*, an open-source, self-managed platform that evaluates chunking strategies and deploys ETL pipelines for RAG systems.

EXPERIENCE

Co-Creator and Software Engineer | *Chunkwise* 2025 – Present

- Scaled the ETL pipeline to parallelize document processing while managing external API rate limits to prevent throttling. (*AWS Batch (Fargate), OpenAI API*)
- Developed a real-time job tracking system to stream progress from AWS Batch document processing jobs to the client UI. (*Server-sent events (SSE)*)
- Built a web interface for experimentation via real-time visualization, side-by-side metrics comparison, and one-click deployment of validated strategies to production. (*TypeScript, React*)
- Developed a modular backend using shared Pydantic models across chunking, evaluation, and orchestration services. (*Python, FastAPI, Docker, ECR*)
- Created a uniform abstraction layer over multiple third-party chunking libraries, enabling consistent visualization and evaluation. (*LangChain, Chonkie*)
- Built an evaluation service that calculates Precision, Recall, and IoU metrics, giving users a quantitative way to measure how chunking strategies impact retrieval accuracy. (*ChromaDB, OpenAI API*)
- Designed a RESTful API to persist workflow data, orchestrate services, and coordinate AWS Batch jobs. (*FastAPI*)
- Managed data persistence for LLM queries, embeddings, and workflows. (*Amazon RDS PostgreSQL, pgvector, Amazon S3*)
- Authored a technical case study and built a professional website. (*TypeScript, Astro*)

Software Engineer | *Open Source Projects* 2024 – 2025

- Request Bin: A developer tool for receiving, persisting, and inspecting HTTP requests and webhooks via a generated URL endpoint (*JavaScript, Express, MongoDB, PostgreSQL, WebSockets, AWS, Nginx*)
- Job Hunt Assistant: A RAG application with chat history and token management (*Python, PostgreSQL, RAG*)
- Shopping Cart: An e-commerce shopping cart app (*TypeScript, React, Express, MongoDB*)

Computer Science & Mathematics High School Teacher 2023 – 2025

- Taught AP Computer Science Principles, AP Calculus, AP Statistics, AP Precalculus, and Precalculus Honors
- Founded three new AP courses, a math competition team, and a D&D club
- Led AI initiatives for students and teachers including guest speakers and workshops

SKILLS

Languages: TypeScript, Python, SQL, HTML, CSS

Frameworks: Node.js, React, Express, FastAPI, Flask

AI: OpenAI API, LangChain and Chonkie libraries, Context Engineering, RAG, Vector Databases, Embeddings

Cloud: AWS (ECS, EC2, Lambda, Batch, RDS, S3, Secrets Manager, CDK, CLI), DigitalOcean, Heroku

Other: PostgreSQL, SQLite, MongoDB, Jest, Vitest, Pytest, Git, Docker, RESTful APIs, Linux, Nginx

EDUCATION

Washington University in St. Louis 2016 – 2020

- Bachelor of Arts in Philosophy-Neuroscience-Psychology, Minor in Computer Science
- Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming, Discrete Math