

George Cann

Senior Data Analyst & AI Developer

fieldwork.cloud
codingpa.com
github.com/CodingPA
dare.cmu.edu
cmu.edu/dietrich/ai

Email: george@georgecann.us

PROFILE

Applied AI engineer and data analyst at Carnegie Mellon University who designs, deploys and operates secure generative and agentic AI services used by hundreds of faculty, staff and students. Builds full-stack AI applications, MCP tool integrations, RAG and document pipelines, and containerized CI/CD deployments. Over 20 years in IT, systems and analytics, including 15 at CMU.

EXPERIENCE

Senior Data Analyst & AI Developer

Jul 2022 – Present

Dietrich College, Carnegie Mellon University

Pittsburgh, PA

- **Co-led the design, build and operation of DARE** (dare.cmu.edu), Dietrich College's open-source generative AI platform serving hundreds of users across cloud LLMs (OpenAI, Anthropic, Google) and open-source models, with RAG search, custom prompts, agentic workflows and cost tracking.
- **Evaluated emerging AI tools and models** and advised college leadership on capability, cost, security and data privacy; benchmarked output quality and designed multi-model routing.
- **Built Exit Tickets** (exit-tickets.hss.cmu.edu), an LLM tool analyzing several hundred student submissions a week across multiple courses; it surfaces action items and learning gaps for instructors and gives students real-time feedback as they submit.
- **Built and connected MCP servers** that give AI agents secure, structured access to DARE's research tools.
- **Architected the Django backends behind these services**, with React and Next.js frontends, PostgreSQL, Redis, WebSockets, Sentry monitoring, and authentication and access control; containerized them with Docker and set up GitHub CI/CD pipelines for automated deployments to production and development servers.
- **Built AI pipelines for document ingestion and extraction** that turn large unstructured collections, such as the USCT pension files and scanned PDF tables, into research-ready data.
- **Applied AI to college operations**, cleaning and reclassifying historical financial records and automating administrative workflows.
- **Adopted coding agents (Claude Code) for daily development** and trained faculty and staff on effective AI use through documentation, examples and consultations.

Principal Consultant

2025 – Present

CodingPA LLC · codingpa.com

Pittsburgh, PA

- **Building fieldwork.cloud** (private beta), a commercial AI platform for real-time field work and large-scale document research: advanced RAG across document collections, live sensor data from Raspberry Pi and ESP32 devices, AI vision checks on photos, and agents that operate the whole system.
- **Released an open-source AI trading simulator** (Django + Next.js) in which AI agents compete by placing paper trades on real-time Tradier market data, informed by FMP, Wikipedia, Reddit and RSS news feeds; deploys with Docker.
- **Released open-source Django and Next.js app templates** for quickly launching secure full-stack applications, with authentication, access control and containerized deployment built in.
- **Advise small businesses on practical AI adoption** and build lightweight automation, such as local Python tools for transcript processing.

Data Analyst

Apr 2021 – Jul 2022

Dietrich College, Carnegie Mellon University

Pittsburgh, PA

- Built teaching and business intelligence dashboards in Tableau Server for college leadership, backed by custom datasets, Python-automated data feeds and secured campus databases.

EXPERIENCE,
CONT.

Senior Systems & Support Administrator	Jan 2017 – Apr 2021
Dietrich College, Carnegie Mellon University	Pittsburgh, PA
- Created the Dietrich Unit Allocation Data Model, used by the Dean's Office to forecast income from central campus, and produced custom reports from the CMU Student Data Warehouse. - Administered Windows and Linux servers, managed college computers with SCCM and Group Policy, and provided tier 3 support.	
EARLIER	
Support Consultant , Dietrich College, CMU — tier 2 support and college Windows deployment	Aug 2013 – Jan 2017
Technology Consultant , CMU Desktop Support Program — Windows deployment for 1,000+ machines	Jun 2011 – Aug 2013
IT Technician , Solar Power Industries, Belle Vernon, PA	Aug 2010 – Jun 2011
IT Help Desk Student Worker , University of Pittsburgh	Sep 2006 – Aug 2010

SKILLS

AI & automation OpenAI, Anthropic Claude, Google Gemini, open-source & self-hosted LLMs, agentic workflows, MCP servers, RAG, model evaluation & multi-model routing, coding agents (Claude Code), Python, document extraction	Data & BI Power BI, Tableau (Desktop, Prep, Server), Snowflake, SQL, dataset design, data cleansing & integration, trend analysis, data visualization, dashboard and report creation
Infrastructure & DevOps Docker, GitHub & CI/CD pipelines, Linux administration, authentication & access control, database administration, data governance, technical documentation	Application Design Django backends, React & Next.js frontends, PostgreSQL, Redis, WebSockets, REST APIs, Sentry monitoring

EDUCATION

Bachelor's Degree, Environmental Studies	2010
University of Pittsburgh, Pittsburgh, PA	
Valedictorian	2005
Union Area High School, New Castle, PA	

SERVICE &
LEADERSHIP

Judge of Elections & Poll Worker	2020 – Present
Pleasant Hills District	
Appointed (not elected) Judge of Elections for primary and general elections; lead the polling-place team, run the precinct from open to close, and follow state procedures so every vote is counted, secured and delivered.	
Lead, Dietrich College Food Drive	2014 – Present
Carnegie Mellon University	
Lead Dietrich College's team in CMU's annual food drive, raising several thousand dollars and several boxes of food each year.	
ALSO AT CMU	
Co-Chair, Take Our Children to Work Day — event of 325+ children and 100+ volunteers	2014 – 2022
Secretary & Member, Staff Council — Unsung Hero and Friend of Staff Council awards	2014 – 2018

REFERENCES

References available upon request.