## core skill stack

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| Category | Skills |
| Geospatial Stack | ArcGIS Pro, ArcGIS Enterprise, AGOL, QGIS, Field Maps, Experience Builder |
| Programming | Python, JavaScript, ArcPy, FastAPI, ArcGIS API for Python, JSAPI |
| Databases | PostgreSQL/PostGIS, DuckDB, Elasticsearch, relational schema design, query optimization |
| AI/ML | GPT-4, DSPy, LangChain, prompt engineering, AI-to-SQL reasoning, agent-based modeling |
| Frontend | React, deck.gl, D3.js, Tailwind, MUI, Chart.js |
| Cloud DevOps | AWS (EC2, Lambda, S3, RDS), GitHub Actions, JWT, secrets handling |
| Tooling | Git, GitHub, PyCharm, VSCode, OpenAI API, custom GPTs, Postman |
| Methodologies | CI/CD, RESTful API design, modular architecture, performance profiling, version control |

## Profile

Full-stack geospatial systems architect and AI/ML engineer specializing in end-to-end GIS solutions, scalable cloud deployment, and intelligent spatial analytics. Builder of the ForgeIQ platform, including the AI-powered ConflictIQ and SpendIQ modules. Trusted by municipal, federal, and research partners for leading data-driven, secure, and automation-enhanced systems. Seeking a role in AI-powered GIS or platform development.

## Work Experience

#### GIS Programmer/Analyst/Specialist

Cheyenne Board of Public Utilities | Oct 2022 – Present

#### Engineered scalable municipal GIS infrastructure with ArcGIS Enterprise + AGOL/PORTAL

#### Automated asset workflows via ArcGIS API for Python

#### Built Field Maps, Experience Builder apps, and Portal dashboards

#### Deployed LSLI workflows for regulatory compliance

### Founder / Architect – ForgeIQ (ConflictIQ + SpendIQ)

Remote | 2024 – Present

#### Built ConflictIQ using OpenAI API + PostGIS + FastAPI for spatial NLQ

#### Developed SpendIQ with DSPy for agentic query interpretation

#### Deployed full-stack React frontend and AWS cloud backend

#### Created secure data pipelines and visual analytics with brushing/filtering

### Project Lead – NASA DEVELOP

Remote/UCCS | May 2022 – Oct 2022

#### Led NDVI + Landsat analysis for USDA tech adoption

#### Delivered dashboards and policy recommendations to NASA

#### Resulted in NASA publication.

### GIS Conflict Researcher – UCCS

Dec 2020 – May 2022

#### Modeled radiation/conflict patterns using predictive spatial analysis

#### Presented findings at GIS in the Rockies

# Proof of work

**ForgeIQ Platform** – Modular intelligence architecture for spatial decision systems

**ConflictIQ** – Real-time geospatial NLQ engine with AI-enhanced querying

**SpendIQ** – DSPy-based next-gen query intelligence for spatial finance data

**NASA DEVELOP** – Satellite-informed ag tech policy intelligence

TR Ingram

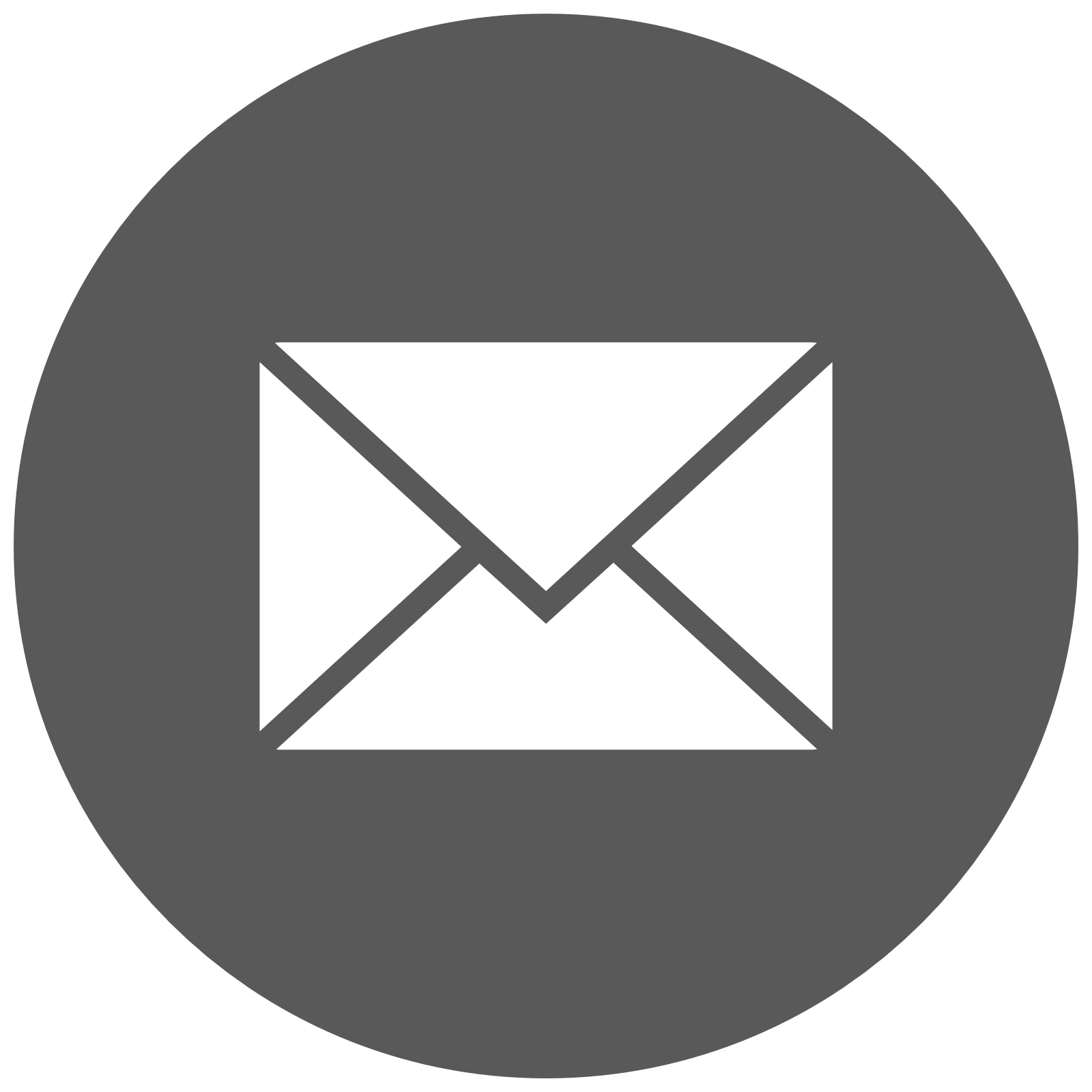
Geospatial AI/ML Engineer  
Full-Stack GIS Systems Architect

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# Education

M.S. GIST – University of Wyoming (2025)  
B.A. Geography – UCCS (2022)  
GIS Certificate – UCCS (2022)