

William P. Kelly III (Trey)

treykelly@gmail.com | [LinkedIn](#) | [GitHub](#) | [YouTube](#) | Security Clearance: *TS/SCI w CI Poly*

OVERVIEW

AI/ML Engineer with experience designing and building production Generative AI solutions, Database Architecture and Design, Data Hosting & Pipelines, Computer Vision Models, and Cloud-Based Systems at scale. Proven background in contributing to and leading product development and backend architecture across over 30 clients in the national security and commercial sectors. AI/ML Engineer at Accenture, Founder of The Kelly Organization, and lifelong computer enthusiast.

SKILLS

Proficient Languages: *Python, Java, C++, Javascript, Typescript, SQL, VHDL, Verilog, Linux*

Technologies and Tools: *Azure Cloud, AWS, Gemini, Docker, Kubernetes, Terraform, Airflow, Temporal, Redis, Jenkins, LLMs, Gen AI Development (RAG, MCP, Prompt Engineering, Vector DBs, Weviate, Pinecone, Azure Cognitive Search, LangChain), RestAPIs, React Native, Next.js, Tailwind, DevOps, MLOps, FastAPI, Flask, FPGAs, ROS, Git/Github, OpenCV, YOLO, PyTorch,*

WORK EXPERIENCE

Accenture Federal Services – Associate Manager - AI/ML Engineer | *Mar 2026 – Present* | *Washington, DC*

- AI/ML & Data Engineer specializing in full-stack development, data science, and generative AI solutions to deliver scalable, production-grade systems for federal clients.
- Develops frontend features, backend APIs, and extended database functionality to support new platform capabilities across the application stack.
- Builds data pipelines that weekly process 2TB+ of structured, semi-structured, and unstructured multimodal data, powering AI-driven correlation features across computer vision, data science, and many more.
- Manages CI/CD and biweekly deployments (Docker, GitHub Actions, Temporal) in an air-gapped environment using an agile sprint cadence, including feature testing, while serving as direct technical liaison to the client and senior leadership.

The Kelly Organization, LLC – Founder | *January 2025 – Present* | *Remote*

- Provide consulting and custom software/AI solutions across web&app development, data science, genAI, and computer vision. Delivered
 - **Dynasty Futures – Co-Lead Developer** | *Jan 2026 – Present* | *Remote*
 - Built a proprietary futures trading platform with over 50 customers.
 - Worked on a team of four (two developers) to execute product design, development, CI/CD, and maintenance for the platform.
 - The product generates roughly \$5,000 weekly in profit
 - **CampusCore – Cofounder & CTO** | *May 2024 – May 2026* | *Remote*
 - Built an AI-driven academic advising platform and released on iOS and Android (App Store and Google Play)
 - Led a team of 6 through product design, development, deployment, and continuous iteration based on university and advisor feedback.
 - Secured \$50,000 in funding through Microsoft for Startups.
 - **OBAI – Contracted Developer** | *October 2025 – January 2026* | *Remote*
 - Helped develop a proprietary computer vision algorithm for users to detect damage and generate cost estimates from the detected damage.
 - Delivered freelance web development, ETL, and other consulting projects for 15 additional clients.

The Aerospace Corporation – AI/ML Engineer | *Jan 2023 – March 2025* | *Washington, DC*

- Built and deployed Generative AI, computer vision, and ETL/ELT data pipeline solutions for space and defense mission partners.
- Developed RAG-based AI systems using Python, GPT-4o/Vision Instruct, GTE, Azure Cloud, and vector DBs (Weaviate/Cognitive Search/Pinecone), integrated via LangChain.
- Designed and maintained 15+ automated pipelines (Python/Node.js, Airflow/Jenkins) using Azure + internal relational/NoSQL databases.
- Delivered CV solutions, including real-time YOLO detection on edge devices, Mask-RCNN segmentation for imagery, and document OCR workflows.
- Co-led enterprise cloud data architecture initiative, centralizing datasets and creating standard operating procedures for secure migration protocols and access controls.

Nordstrom Corporate – Cyber Security Intern (Penetration Tester) | *June - August 2022* | *Seattle, WA*

- Employed penetration testing techniques to identify and secure vulnerabilities in Nordstrom's application infrastructure.

Procter & Gamble – Data Science Intern | *Boston, MA* | *May - August 2021*

- Migrated the production data of 4 global plants to Azure Cloud, improving real-time data availability and allowing for more in-depth global decision-making.

EDUCATION

- **Northwestern University (2024)** | Evanston, IL | GPA: 3.5
 - **Master of Science** in Computer Engineering (Focus: AI and Machine Learning)
 - GEM Fellowship Recipient
 - **Relevant Coursework:** Database Systems, Machine Learning: Foundations, Applications, and Algorithms, AI for Science, Deep Learning: Foundations, Applications, and Algorithms, Human Computer Interaction, Practicum Intelligent Information Systems, Social Media mining, Embedded AI
- **North Carolina Agricultural and Technical State University (2023)**, | Greensboro, NC | GPA: 3.2
 - **Bachelor of Science** in Computer Engineering
 - *Northrop Grumman Computer Engineering Scholarship Recipient, Kappa Alpha Psi Fraternity Inc.*
 - **Relevant Coursework:** Digital Systems Design, Differential Equations, Internet Systems, Electric Circuit Analysis I&II, Microprocessors I&II, Operating Systems, Electronics, Programming Languages, Computer Architecture, Linear Systems and Signals, Embedded Systems Design, App Development for Smart Devices