

LUKE CONRAN

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EDUCATION

- **Texas A&M University** Dec 2027
MS in Data Science — GPA: 4.00 College Station, TX
- **Texas A&M University** May 2027
BS in Computer Science (Honors); Minor in Statistics — GPA: 4.00 College Station, TX

Relevant Coursework: Machine Learning, Artificial Intelligence, Data Science, Deep Learning, Data Visualization, Statistical Computing, Linear Algebra, Algorithm Design & Analysis, Parallel Computing, Software Engineering

EXPERIENCE

- **Data Science Intern** May 2026 – Aug 2026
World Wide Technology St. Louis, MO
 - Built an end-to-end ML pipeline converting LiDAR point clouds into engineering-grade CAD (DXF) models, projected to cut manual extraction labor by 50%+ (the majority of total project labor), an estimated \$12.5M in annual value.
 - Processed 78M-point (Toronto-3D) and 150M-point client clouds, leveraging in-house HPC for computation.
 - Developed and pitched CARDINAL, an intern-operations platform; placed 2nd of 19 teams company-wide.
- **Machine Learning Student Researcher** Aug 2025 – Present
OptMAI Lab, Texas A&M University College Station, TX
 - Conducted hybrid-loss experiments (cross-entropy vs. supervised contrastive) for 3D MRI Alzheimer's classification (AD/MCI/NC) on ADNI, finding SupCon lifted recall on MCI (the hardest class) by up to 23.5 pp and AUC by 3.5 pp.
 - Designed end-to-end training pipelines on TAMU HPRC for MedicalNet-pretrained 3D ResNet backbones.
- **AI Systems Intern** Jun 2024 – Aug 2024
Rocket Mortgage / Mr. Cooper Remote
 - Ran response evaluation and refined call labeling for two production LLM systems (Quality AI, Agent-Assist), improving output reliability and contributing to a 15-second cut in average call time across a high-volume call center.

PROJECTS

- **American Airlines × Aggie Data Science Club** Jan 2025 – Apr 2025
Python, Pandas, Snowflake, scikit-learn, SciPy
 - Created a forecasting pipeline from millions of bag-scans, predicting the bag-load curve ~2 weeks out from flight-schedule features ($R^2 = 0.90$ on a held-out week), enabling proactive staffing in the operational processes.
- **Vertical Flight Society Operations & Engagement Platform** Aug 2025 – Dec 2025
Ruby on Rails, PostgreSQL, Docker, GitHub Actions, CI/CD, Agile/Scrum
 - Led a 4-person team as Product Owner to ship a full-stack Rails platform (PostgreSQL, Docker, GitHub Actions CI/CD) for a real client across 3 sprints, translating stakeholder requirements into delivered features.

SKILLS

- **Languages:** Python, SQL, C++, Ruby, JavaScript, HTML/CSS
- **ML & Data Science:** PyTorch, scikit-learn, NumPy, Pandas, SciPy, Matplotlib, CNNs, ResNets, contrastive learning
- **MLOps & Infrastructure:** Docker, GitHub Actions (CI/CD), SLURM / HPC clusters, Git, Linux, PostgreSQL
- **Methods & Practices:** Distributed/GPU training, data pipelines, LiDAR/point-cloud processing, Agile/Scrum

LEADERSHIP EXPERIENCE

- **Advancement Counselor** Aug 2023 – May 2025
Freshmen Reaching Excellence In Engineering (F.R.E.E.)
 - Selected as one of 18 counselors from 750+ applicants (top 2.4%) to mentor first-year engineering students.
 - Facilitated resume, LinkedIn, and career-strategy workshops for 100+ members.
 - Organized an ExxonMobil Houston networking event connecting 80+ students with industry professionals.

ADDITIONAL INFORMATION

Interests: Travel, chess, intramural athletics, strength training, non-fiction and fantasy reading