Dominic Catania

dom@catania.com
(682)582-5795

linkedin.com/in/dominiccatania
https://github.com/DomC18
https://domcatania.net

Objective

Motivated sophomore Computer Engineering major seeking an internship in data industry. Experienced in aggregation, cleaning, analysis, and transforming raw data into actionable insights.

Education

- **Texas A&M University** — College Station, TX
  B.S. Computer Engineering; University Honors; GPA: 3.92 — *Aug 2024 – May 2028*
  - Relevant Coursework: Statistics Principles I & II; Program Design & Concepts; Discrete Structures for Computing

Featured Projects

- **Red Light Green Light** — Apr 2025
  Texas A&M Datathon
  - Utilized Python Selenium library to scrape element data and make moves in the Squid Game "Red Light Green Light" presented as a challenge in Texas A&M Datathon
- **Vigil** — Jul 2024 - Jan 2025
  Nolan Catholic High School
  - Django web application; users set up configurations for FRC robot and dynamically analyze match data using Plotly powered by Ollama AI giving suggestions to user on how to improve performance and handle anomalies
- **PathGen** — Sep 2024 - Nov 2024
  Aggie Robotics
  - React web application; users build straight and curved paths for VEXU robots; event markers, constraint zones, and customizations for each robot; path simulations based on weight, friction, and COG

Leadership Experience

- **Triangle Fraternity** — Oct 2024 - Present
  Recruitment Chair
  - Applied data-driven strategies to design and optimize recruitment pipelines, resulting in 20+ members added
  - Utilized software tools and digital platforms to manage outreach, engagement, and performance metrics
  - Developed and executed outreach initiatives, information sessions, and professional development to establish organizational presence
  - Organized 3 professional workshops and academic review sessions aiding younger colleagues
- **First Robotics Competition Team 4206** — Aug 2021 - May 2024
  Team Captain; Driver; Lead Programmer
  - Led a 30+ member robotics team, overseeing project management, system integration, and collaboration
  - Placed 3rd in the World by optimizing performance through data logging and match strategy
  - Applied technical problem-solving, adaptability, and teamwork skills in high-pressure environments
  - Mentored 8 newer members in sensor integration, vision processing, and feedback systems enhancing robot precision
  - Incorporated distance interpolation, auto-aim, autonomous decision-making, full-field localization and pose estimation using inverse kinematics and AprilTag IDs, increasing efficiency by 80%

Achievements

- **Datathon Second Place**
- **Reta & HJ Haynes '46 University Scholarship**
- **FIRST Robotics Championship - World Semifinalists**

Skills

- **Languages**: Python, SQL, R, Java, C++, JS **Technologies**: Tableau, Excel, Django, React, Power BI