

Dominic Catania

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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
- **FRC 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++, Javascript

- **Technologies:** Tableau, Excel, Django, React