

Maikol Ruiz

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EDUCATION

University of Central Florida

B.S. Mechanical Engineering; Computer Science Minor; GPA: 3.69/4.00

Orlando, FL

Expected Dec 2027

PRODUCT & ENGINEERING EXPERIENCE

Fornax Studio

Co-Founder & Head of Product and Technology

Richmond, KY

May 2026 – Present

- Directed product development of shop-management software for job tracking, BOMs, costing and quoting.
- Created a scraping tool that compiled 140K potential business leads for prospecting and outreach.
- Oversaw test-driven development infrastructure with automated validation and review gates for product changes.

Medtronic

Automation Engineer (Contract)

Minneapolis, MN

Jun 2026 – Present

- Led a cross-site mechanical design workstream, delivering 61 designs across 12 manufacturing automation systems.
- Closed throughput gaps with the design team, projecting a 20–30% machine gain.
- Diagnosed deburr tool-material limits and redesigned tooling, raising trial yield from 20% to 90%.

MPCL Research Lab, University of Central Florida

Undergraduate Research Assistant

Orlando, FL

Mar 2026 – Sep 2026

- Reverse-engineered legacy column-buckling rigs, designing protoboards that restored systems to correct operation.

GE Appliances

Embedded Software Engineering Co-op

Louisville, KY

Aug 2025 – Dec 2025

- Developed C scripts validating parametric OTA files, enabling QA to test firmware releases on Wi-Fi A/C units.
- Led a co-op Sumo Bot team, integrating a LiPo and regulator to overdrive motors by 40% without failures.

Medtronic

Automation Engineering Intern

Minneapolis, MN

Jun 2025 – Aug 2025

- Built and iterated 3D-printed prototypes from vendor concepts for an automation project projected to save \$1.3M.
- Redesigning an oven fixture in SolidWorks, expanding automation scope and cutting labor up to 83%.
- Authored the acceptance test plan adopted for factory acceptance of a \$3.5M-saving robotic automation system.

GE Appliances

R&D Mechanical Engineering Co-op

Louisville, KY

Aug 2024 – Dec 2024

- Led a co-op team designing a universal oven spill-guard, kickstarting a new R&D product line.
- Built Python tools, a BOM cost analyzer and a sensor-to-Excel converter, cutting manual review for R&D leads.

Zero Make Lab

Owner, Engineering YouTube Channel

Orlando, FL

Sep 2025 – Present

- Create and explain PCB, electronics, firmware and manufacturing builds; 50K+ combined views/impressions.

PROJECTS

F1TENTH Autonomous Racing

SHPE Team

Orlando, FL

Mar 2026 – Apr 2026

- Built and raced an F1TENTH autonomous car using LiDAR, running ROS in Docker on a Raspberry Pi.

SEDS (Rocketry Club)

Payload Engineer (FIU) to Design Engineer (UCF)

Miami, FL

Jan 2024 – Apr 2025

- Designed Spaceport America Cup powertrains and composite fins (SolidWorks FEA) with Blue Origin mentors.

SKILLS

Product and Delivery: Product Development, Prototyping, BOM Costing, Acceptance Testing, Technical Writing
Engineering Tools: SolidWorks (CSWA), Creo, Windchill, Python, C/C++, Git, Docker, PCB Design, 3D Printing