MICHAEL PERRY

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EDUCATION

Florida State University · FAMU-FSU College of Engineering — Tallahassee, FL
B.S. Mechanical Engineering | GPA: 3.61/4.00 — Expected May 2028
Herb Lotman Foundation Scholar | Study Abroad: Valencia, Spain

ENGINEERING EXPERIENCE

Trefz Engineering — Horsham, PA
Mechanical Engineering Intern — May - Aug 2026

- Built the first Pipe-Flo hydraulic model of the University of Delaware campus chilled-water network, integrating historical engineering records into a system-level reference for future utility connections.
- Modeled interconnected hydraulic systems at the University of Pennsylvania, evaluating flow distribution and interactions across multi-building central utility infrastructure.
- Co-authored a technical feasibility analysis for the UPenn Wharton Learning Center, assessing system capacity, utility interfaces, and proposed connections.
- Performed engineering calculations and supported equipment selection, system layouts, and coordinated mechanical design in Autodesk Revit.
- Reviewed multidisciplinary drawings and specifications to identify design conflicts and assess constructability and code compliance.

ENGINEERING PROJECTS

Stirling Engine | Mechanical Design & Fabrication — Spring 2026

- Designed a complete Stirling engine in SolidWorks, from part modeling through full assembly, and built it into a working engine.
- Machined the engine components in the university metal machine shop, translating CAD models into finished parts.
- Performed tolerance analysis to ensure proper fit and function of mating parts, and developed the bill of materials for the build.

Senior Design (EML4550) | Medication Dispensing Device — Fall 2026 - Present

- Collaborating on an engineering team to design an automated medication dispensing device for mid-stage dementia patients.
- Contributing to the team's design evidence manual documenting requirements, concept development, and design decisions.

CNC Router Programming | 3D Waving American Flag — Personal Project

- Programmed CNC router toolpaths in Mastercam and operated the router to machine a three-dimensional waving American flag from wood, taking the part from digital design to finished piece.

Kineticly | Multi-Agent AI Research Platform (kineticly.io) — Launched Oct 2026

- Built and launched a Python-based platform in which specialized AI agents discover, research, write, and verify articles on emerging science and engineering research.
- Designed modular workflows with structured data validation, citation checks, and automated review gates to catch failures and verify outputs before publication.

LEADERSHIP

FSU Startup Studio | Founder & President

- Founded a student startup incubator supporting interdisciplinary product development, physical prototyping, and software user-experience validation.

Zeta Beta Tau | Founding Father & VP of Operations

- Led chapter operations and implemented standardized processes to support efficiency and policy compliance.

TECHNICAL SKILLS

CAD & Design: SolidWorks (advanced), AutoCAD, Autodesk Revit, Fusion 360, FreeCAD, basic GD&T, tolerance analysis
Manufacturing: Mastercam, CNC router programming, manual mill and lathe, laser cutting, FDM 3D printing
Engineering Analysis: Pipe-Flo hydraulic modeling, system modeling, engineering calculations, feasibility analysis, Bluebeam Revu
Programming & Tools: Python, MATLAB, C++ (working knowledge), basic JavaScript, Microsoft Excel
Languages: English (native), Russian (conversational), Spanish (basic)