

Peter Vlahakis

800 West 38th Street Austin, Texas | (224)–806–4022 | pvlahakis@utexas.edu

Education

The University of Texas at Austin

Austin, TX

Bachelor of Science in Mechanical Engineering

May 2027

Technical Tracks: Design & Manufacturing and Advanced Materials Engineering

Cumulative GPA: 3.95

Honors: Cockrell School of Engineering College Scholar; Theta Chi Blue Memorial Scholarship (x2)

Experience

Heat Transfer Solutions – Texas

Round Rock, TX

Mechanical Sales Engineering Intern

May-August 2026

- Evaluated commercial HVAC applications by analyzing submittals, equipment schedules, and thermal, electrical, and dimensional specifications
- Selected and configured Daikin Air Handling Units, Rooftop Units, split systems, and air-cooled chillers to meet project performance and installation requirements
- Partnered with MEP engineers and contractors to resolve issues from selection through post-startup support

HDR Externship

Austin, TX

Extern

January 2025

- Developed leadership and interpersonal communication skills by simulating the role of a project manager, managing collaboration among 10 engineers from various disciplines to address client needs
- Presented integrated mechanical engineering designs to HDR executives for a hospital project, emphasizing the coordination of MEP systems to optimize efficiency and functionality

United Mechanical Corporation

Bensenville, IL

HVAC Installer, Fabricator

May-August 2022, 2023, 2024

- Installed refrigeration and HVAC systems for major Chicagoland grocers and other commercial properties
- Designed and fabricated 20+ custom curbs, ductwork assemblies, and hot food tables using a plasma cutter, press brake, hydraulic shear, and manual mill

Activities & Extracurriculars

University of Texas Baja SAE, *Founder/Vice-Captain/Chassis Lead/Manufacturing Lead*

2025-Present

- Directed project planning, budget allocation, sponsor relations, and engagement with judges and industry engineers, scaling the team from 10 to 175+ members and raising \$35,000+ in sponsorship support
- Led two teams of 5+ engineers in the design, development, and manufacturing of a Baja SAE chassis using SolidWorks and ANSYS, ensuring structural integrity, driver safety, and compliance with competition rules

CNC Milling & Computer Aided Manufacturing, *Manufacturing Engineer/Machinist*

2025-Present

- Programmed toolpaths in Fusion 360 CAM and machined aluminum Speed UTV race car components on a Haas VF-2 CNC Mill, including bed-delete brackets, a fuel reservoir hose adapter, and a CV axle mount
- Machined aluminum household items, such as a 5-piece coaster set, desktop organizer, and wall plaque, optimizing Fusion 360 toolpaths for reduced machining time and quality surface finish

Men's Growth & Development Groups, *Member*

2023-2025

- Strengthened interpersonal communication skills by regularly attending 30+ group sessions with UT CMHC and an Austin, TX community men's group, focusing on active listening, empathy, and expression
- Improved adaptability, patience, and relationship-building by engaging weekly with a diverse group of 4-10 members, fostering effective communication and collaboration skills

Automotive Work & Dirt Bike Racing, *Mechanic/Racer*

2019-Present

- Rebuilt a non-running 2001 Honda CR125R dirt bike through complete disassembly and reconstruction.
- Repaired and modified carburetors, clutches, and suspension on 2 KTM and 1 Husqvarna dirt bikes

Skills

Design & Simulation: SolidWorks, Fusion 360 CAD/CAM, ANSYS, MATLAB

Manufacturing: CNC Mill (Haas VF-2), Manual Mill, Manual Lathe, Dynatorch Plasma Cutter, Press Brake