

Peter Sklavounos

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EDUCATION AND PROFESSIONAL CERTIFICATIONS

The Cooper Union for the Advancement of Science and Art	New York, NY
Master of Engineering in Mechanical Engineering, GPA: 4.0/4.0	December 2024
Bachelor of Engineering in Mechanical Engineering, Minor in Economics, <i>cum laude</i>	May 2024
FE Mechanical (EIT registered) and OSHA 10 License	February 2024

PROFESSIONAL EXPERIENCE

NYC Department of Buildings, Boiler Division	New York, NY
<i>Mechanical Engineering Intern and Panelist for Engineering Forum</i>	June 2022 – October 2023
<ul style="list-style-type: none">Performed 30+ mechanical room and elevator inspections to enforce adherence to NYC CodesDesigned a checklist to standardize boiler inspections and improve safety compliance and process efficiency. The checklist was adopted by 50+ inspectors and insurance firmsDeveloped safety operating procedures and training materials for the plumbing and mechanical departments alongside the Assistant Commissioner and Agency Directors	
KPMG Lower Gulf	Dubai, UAE
<i>Data and Systems Intern</i>	July 2019
<ul style="list-style-type: none">Implemented data conversion for entire client base in Microsoft Dynamics 365 and improved system efficiency and accuracy through cleansing of 200+ client records	

LEADERSHIP AND SELECT PROJECTS

Mechanical Design and Testing with FEA	August 2023 – December 2024
<i>Project Lead, Co-Author of Published ASME IMECE Paper 2024</i>	
<ul style="list-style-type: none">Devised a novel thermo-responsive polymer blend needle with 69% higher flexibility at body temperature, enabling tailored stiffness for improved patient care during hemodialysisManufactured the needle with CNC machining and injection molding. Validated its performance through Ansys FEA and tensile testing, ensuring a safety factor of 3 against clinical buckling thresholds	
The Cooper Union Hyperloop Team	August 2021 – December 2024
<i>President and Frames Subsystem Lead</i>	
<ul style="list-style-type: none">Led five subsystems and 20+ team members and managed \$30,000 in college fundingDesigned a high-strength subsystem frame in CAD for 1400N braking loads with aluminum beams to reduce mass by 43%. Validated the frame through Ansys FEA and iterative empirical brake dynamometer testing	
Heat Exchanger Design with CFD Validation	April 2023
<i>Project Lead</i>	
<ul style="list-style-type: none">Designed a compact heat exchanger to cool thermal oil from 350°F to 215°F using Ansys CFD simulations and manual calculations, optimizing performance for client requirementsIntegrated performance data into Trane TRACE 3D Plus to assess the system cooling capacity impact	
Wind Tunnel Manufacturing Project	May 2023
<i>Project Lead</i>	
<ul style="list-style-type: none">Spearheaded a \$2,000 project to replicate a Cooper Union wind tunnel test section, cutting costs by 60% through in-house building and strategic sourcing of alternative industrial equipment suppliers	

AWARDS

- The Cooper Union President's Grant (2024)
- The Cooper Union Howard Silfin ME Internship Award (2023)
- Tuition scholarships for BE and ME at The Cooper Union (2020 – 2024)
- The Duke of Edinburgh's International Award, Silver Standard (2018)

SKILLS AND INTERESTS

- Technical proficiency: AutoCAD, SolidWorks, Siemens NX, Ansys, Altair, MATLAB, CNC Machining
- Debating: World Scholar's Cup Gold Medalist at Yale University, Vietnam, and UAE (2016 – 2017)
- Languages: Greek (fluent), French (conversational)
- Interests: Juniors' coach and adults' golf caddie at Special Olympics World Games Abu Dhabi; Junior Golf Champion, Dubai (HCP: 9.0); volunteering; tennis; travelling; data science coding