

# Peter Sklavounos

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## Education and Professional Certifications

<b>The Cooper Union for the Advancement of Science and Art</b>	<b>New York, NY</b>
ME Mechanical Engineering, 4.0 GPA	December 2024
BE Mechanical Engineering, <i>Cum Laude Honors Graduate</i> ; Minor in Economics	May 2024
FE Mechanical and OSHA 10 License	February 2024

## Professional Experience

<b>Department of Buildings, Boiler Division</b>	<b>New York, NY</b>
<i>Mechanical Engineering Intern and Panelist for Engineering forum</i>	June 2022 – October 2023
<ul style="list-style-type: none"><li>Performed 30+ mechanical room and elevator inspections to check compliance with NYC Codes</li><li>Standardized boiler inspections and improved process efficiency and safety compliance through a new checklist that was subsequently adopted by 50+ inspectors and insurance firms</li><li>Developed technical training resources and safety operating procedures for all agencies in close collaboration with the Assistant Commissioner and Agency Directors</li></ul>	
<b>KPMG Lower Gulf</b>	<b>Dubai, UAE</b>
<i>IT Department Intern</i>	July 2019
<ul style="list-style-type: none"><li>Implemented data conversion for entire client base in Microsoft Dynamics 365 Customer Relationship Management system. Cleansed 200+ records and eliminated duplicate entries</li></ul>	

## Leadership and Select Projects

<b>Hemodialysis Needle Redesign for Improved Patient Care</b>	<b>2023 – Present</b>
<i>Project Lead Co-Author of ASME IMECE Paper 2024</i>	
<ul style="list-style-type: none"><li>Engineered a novel hemodialysis needle that is 69% more flexible at body temperature and conforms to vasculature, thus reducing patient discomfort and vascular trauma</li><li>Manufactured a thermo-responsive, polymer blend needle using CNC machining and injection molding. Conducted tensile and buckling tests and compared empirical data to Ansys simulations</li></ul>	
<b>The Cooper Union Hyperloop Team</b>	<b>2021 – Present</b>
<i>President and Frames Subsystem Lead</i>	
<ul style="list-style-type: none"><li>Lead five subsystems and 20+ team members. Manage \$30,000 in university funding</li><li>Achieved 43% mass reduction by replacing steel beams with aluminum cross-sections while maintaining the design parameters</li></ul>	
<b>Energy Efficiency Building Systems Project</b>	<b>November 2023</b>
<i>Project Lead</i>	
<ul style="list-style-type: none"><li>Refined CO<sub>2</sub> monitoring in the classroom and achieved 12% removal through an optimized sensor placement using SolidWorks Flow Simulation, Python-based data analytics, and BMS software</li></ul>	
<b>Heat Exchanger Design with CFD Validation</b>	<b>April 2023</b>
<i>Project Lead</i>	
<ul style="list-style-type: none"><li>Designed a heat exchanger to cool motor oil from 350°F to 215°F using CFD simulations and manual calculations, optimizing performance for client's requirements</li><li>Achieved 89% heat transfer efficiency by optimizing copper and aluminum materials to minimize weight</li></ul>	
<b>Wind Tunnel Manufacturing Project</b>	<b>May 2023</b>
<i>Project Lead</i>	
<ul style="list-style-type: none"><li>Conceived and managed a \$2,000 project to replicate a Cooper Union wind tunnel test section, cutting costs by 60% through in-house production and sourcing from alternative industrial equipment suppliers</li></ul>	

## Awards

- The Cooper Union President's Grant (2024)
- The Cooper Union Howard Silfin ME Internship Award (2023)
- Half-Tuition Scholarship for The Cooper Union BE Mechanical Engineering (2021)
- The Duke of Edinburgh's International Award, Silver Standard (2018)

## Skills

- Technical proficiency: AutoCAD; SolidWorks; Revit; MATLAB; LaTeX; Ansys; Bluebeam; 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; handicap 9.0. Distinctions in junior tournaments (Greece, Cyprus, UAE)