

Michel Domenella

✉ domenellamichel@gmail.com ☎ (773) 490-0147 🔗 micheldomenella.com in Michel Domenella

Summary

Mechanical engineer with 2+ years of front-end product development experience, translating human-centered research into differentiated concepts and validated prototypes across professional tools and biomedical industries. Strong hands-on fabrication skills (CAD, 3D printing, CNC, laser cutting) paired with a needfinding and NPD background.

Education

MS	Northwestern University , Engineering Design Innovation	Aug 2025 – March 2027
BS	University of Notre Dame , Mechanical Engineering	2019 – 2023

Work Experience

Klein Tools , Product Design Intern	Lincolnshire, IL June 2026 – Present
- Conducted and synthesized primary field research with outdoor tradespeople and secondary research to surface latent vs. stated needs, applying affinity mapping and Jobs-to-be-Done analysis to identify whitespace opportunities. - Designed and fabricated multiple prototypes using methods like a CNC mill, 3D printing, and laser cutting, to gather user feedback in internal qualitative research sessions. - Advocated for and introduced human-centered design practices into an established product development pipeline, championing new research and visualization methods to bring user insight earlier into the process.	
Clippard , New Product Development Engineer	Cincinnati, OH 2023 – 2025
- Collaborated with the head of R&D to design and release a panel-mounted pinch valve for a cell and gene therapy client, from concept through commercial launch, rapidly building and testing physical iterations to meet user needs around fastening, cleanliness, and organization. - Resolved a critical failure in a custom valve for an at-home hemodialysis machine through root-cause analysis and close cross-functional collaboration, bringing the beta failure rate to 0%. - Designed and validated an oxygen-mixing blender for a neonatal ventilator, delivering a fully functional beta unit in 3 months.	

Projects

Northwestern , P&G Sponsored Project	Chicago, IL Sept 2025 – Dec 2025
- Led a multidisciplinary team of 5 through a full human-centered design process, from in-home and central-site consumer research to a fully functioning physical prototype. - Synthesized findings from 5 consumer research sessions into design requirements that directly informed iterative prototyping, presented to P&G stakeholders.	
Northwestern , Needfinding in Medical Environments	Chicago, IL April 2026 – June 2026
- Conducted clinical observations and stakeholder interviews across a Northwestern GI endoscopy clinic to surface unmet needs in Barrett's Esophagus screening workflows. - Synthesized findings into journey maps and opportunity frameworks, developing "How Might We" statements to prioritize actionable design opportunities.	

Skills

Technical Skills: CAD Modeling, Rapid Prototyping (3D Printing, CNC, Laser Cutting, Manual Machining), Concept Ideation, Human-Centered Design Research, Affinity Mapping, Jobs-to-be-Done, NPD

Software: SolidWorks (CAD), Autodesk CAM, Arduino IDE, C/C++, Python, VBA, MATLAB, LaTeX, Microsoft Office Suite