

Christian Petty



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Mechanical Design Engineer with 7 years of hands-on multi-disciplinary Agile product development experience. I have adapted my creativity, detailed technical knowledge, and inclusive leadership style across successful projects in construction, aerospace, medical, and robotics. I am seeking contract design and development engagements and bring the following:

- Requirements driven, risk-based, product development approach quickly adaptable to your organization's workflow and risk model.
- Keen eye for rapid mechanical design in highly integrated, multi-disciplinary environments using the full gamut of modern manufacturing processes.
- Robust CAD and design practices in SOLIDWORKS (CSWP), Onshape (certified professional), Creo, and Fusion 360 using PDM/Windchill.
- First principles-based detailed analyses and automation using Mathcad, ANSYS Mechanical FEA, VBA, FeatureScript, Python, and HTML/CSS/JS.
- In-house capabilities including FFF/FDM 3D printer, high-performance Windows workstation, Onshape Professional, and 200 sq ft of prototyping space.

Mechanical Design Engineering Consultant, Founder at *Radian R&D* from 2021 – Present

Mechanical Engineer I, II at *Synchroness Inc. (now ALTEN)* from 2018 – 2021

- Mechanical lead and contributor to multi-million-dollar product development projects in medical, defense, aerospace, and robotics in teams (2-15) and individual efforts.
- Led and executed the mechanical effort in the first successful engagement with an autonomous quadruped manufacturer in developing their first docking and charging station, exceeding performance and reliability requirements and expectations.
- Fostered an inclusive and enjoyable work environment through open communication, cross-project reviews, and positivity through technical and operational challenges.
- Created internal templates and calculators for routine analysis tasks including bolted joints and tolerance stacks, then automated them with VBA and Mathcad.
- Dedicated to the continual assessment and mitigation of risks and resource constraints against project goals and product requirements through organized planning and timely communication.

Product Development Engineer at *Dayton Superior Corp.* from 2015 – 2017

- Lead design engineer for bridge hangers, composite panel anchors, and concrete bolts.
- Leader of the class of 2017 business education and leadership development program.

B.S. in Mechanical Engineering, cum laude from *Miami University* in Oxford, OH in 2015