Jake L. Menown

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Introduction & Goals

I'm a senior mechanical design engineer with an established history of coordinating teams, consistently meeting schedules, and producing designs that mitigate system risks. I'm interested in working for a company that offers diverse and meritocratic career development, along with an opportunity to work on innovative technologies where an exchange in expertise would be mutually beneficial.

Professional Experience

Pratt & Whitney *(2017-Present, Jupiter FL)*

- Employed as a mechanical design lead developing systems for Pratt & Whitney turbofan engines.
- Directed teams of up to six engineers in both in-house and remote outsourced environments.
- Designed cutting edge hardware including a turbine tip clearance control system and an oil regulation manifold.
- Oversaw the full development cycle from conceptual design to system validation.
- Worked with military and commercial customers and suppliers to define and refine system requirements.
- Coordinated systems engineering with airflow experts, structural analysts, and controls engineers.
- Took initiative to develop software tools that radically reduced workload for certain tasks.
- Instructed courses on internal tools and guided junior engineers to onboard them in P&W tools and practices.

Belcan Corporation *(2015-2017, Palm Beach Gardens FL)*

- Developed hardware for Pratt & Whitney's advanced military engine programs ("AETP" & other prototypes) including fuel control, hydraulic, and flow-critical gas systems with innovative geometry based on CFD iteration.
- Presented comprehensive hardware packages to military (USAF) customers.
- Worked within a team to increase profitability of P&W's NGPF commercial turbofans by redesigning hardware for manufacturability through supplier reviews and re-conceptualizing designs with system requirements in mind.

Skills

Mechanical Design

- Weight and cost optimization through the use of formed ducts and brackets and thin-wall tubing
- Design for exotic manufacturing processes including DMLS, EDM, and MIM
  (Worked on the team that introduced Metal Injection Molding to P&W)
- Utilization of aerospace alloys including Inconel (X, 625, 718), Titanium (6Al-4V), 6061, and 300 series SST
- Coordination and iteration with suppliers to develop consistently producible designs
- Structural assessments, flow analysis, and geometry reduction using SolidThinking Inspire

Engineering Software

- Unigraphics (NX) CAD
- SolidWorks CAD
- ANSYS FEA
- Teamcenter PLM
- SAP ERP

Computer Programming

- MATLAB
- C# / Visual Studio
- .NET Excel API
- Visual Basic & Excel Macros
- Python

Education

Bachelor's Degree in Mechanical Engineering

Florida Atlantic University, Boca Raton, FL

Interests

I have a few hobbies that keep me busy outside of the office. I maintain an electronics lab where I prototype hardware with custom-designed circuit boards and housings that I produce at home on a 3D printer. I also like to cook, read science fiction, ride my motorcycle, and tinker with my website at jlmenown.net.