

DAVID RANDOLPH MARTIN II

Mechanical Engineer / Consultant

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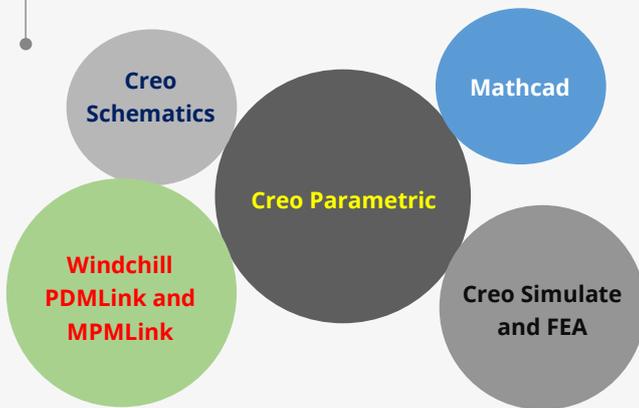
Expert in design, analysis, manufacturing, and routed systems using Creo Parametric and data management, change management, and configuration management using Windchill PDMLink.

EDUCATION

Massachusetts
Institute of
Technology
Cambridge, MA

Bachelor of Science in
Mechanical Engineering

PROFESSIONAL SKILLS



BOOKS

[Top Down Design in Creo Parametric](#)

[Design Intent in Creo Parametric](#)

[Configuring Creo Parametric 3.0](#)

[Configuring Creo Parametric 4.0](#)

[Configuring Creo Parametric 7.0](#)

[Engineering Calculations with Creo Parametric and PTC Mathcad Prime](#)

LEADERSHIP EXPERIENCE

Former Captain, United States Army Reserves

- Company Commander of over 100 soldiers.
- M1A1 Tank Platoon Leader and Detachment Officer in Charge (OIC) for over 50 Soldiers.
- Executive Officer, Regimental Headquarters Company (approximately 330 soldiers).
- Graduate of Armor Officer Basic Course.

EXPERIENCE

2021-2023
Elroy Air
South San Francisco; Remote

Configuration Manager

Responsible for developing and maintaining configuration of uncrewed autonomous vehicles (UAVs) for middle-mile delivery, including mechanical CAD, cable harnesses, and software. Manage SolidWorks, NX, and Windchill. Member of IFS Enterprise Resource Planning implementation team.

2017-2020
Blue Origin
Kent WA

Senior CAD/PLM Administrator

Process development, training, and user support for Creo Parametric and Windchill. Perform structural design on New Glenn rocket. Process owner for Design and Development for AS9100 certification.

2014-2017
Amazon Prime Air
Seattle WA

Previously Avionics Engineer; performed cable harness design on New Shepard rocket using Creo Schematics and Creo Parametric.

Senior Mechanical Design Engineer

Responsible for top level assembly design, wiring schematics, and cable harness design in unmanned aerial vehicles (drones). Performed Change Management, BOM Management, Configuration Management, and Supplier Management for vehicles in Windchill. CAD Administrator and Windchill Administrator.

<p>2013-2014 Amazon <i>Sunnyvale CA</i></p>	<p>Senior MCAD Application Specialist</p> <p>Managed Creo Parametric for over 250 users in multiple locations throughout the United States and Asia on all Amazon hardware products including Kindle tablets and readers, Fire TV, Fire Phone, and Echo. Developed design standards and processes, and provided training and user support.</p>
<p>2010-2013 PTC <i>Los Angeles CA</i></p>	<p>Senior Learning Consultant</p> <p>Developed and delivered training and consulting for companies such as GE Healthcare, Cummins, and Foxconn in their implementation of Creo Parametric and Windchill PDMLink.</p>
<p>2006-2010 NxRev, Inc. <i>Santa Clara CA</i></p>	<p>Application Engineer</p> <p>Provided consulting, training, and mentoring in Pro/ENGINEER for Mechanical Computer Aided Engineering and Windchill for Product Lifecycle Management (PLM).</p>
<p>2004-2006 TriStar <i>Newport Beach CA</i></p>	<p>Application Engineer</p> <p>Provided consulting and training to companies to maximize their implementation and utilization of Pro/ENGINEER, Mechanica, and Intralink.</p>
<p>2003-2004 Torgon Industries <i>San Diego CA</i></p>	<p>Pro/Engineer Consultant and Instructor</p> <p>Pro/ENGINEER Consultant and Instructor.</p>
<p>2001-2003 PTC <i>El Segundo CA</i></p>	<p>Education Specialist</p> <p>Taught classes in design using Pro/ENGINEER. Developed courseware and training materials.</p>
<p>1997-1999 The Boeing Company <i>Seal Beach CA</i></p>	<p>Mechanical Designer Engineer</p> <p>Developed conceptual configurations, CAD models, and production drawings using I-DEAS and Unigraphics for satellites including GPS.</p>
<p>1993-1997 Lockheed Martin Corporation <i>Orlando FL</i></p>	<p>Structural Analyst and Test Engineer</p> <p>Performed Finite Element Analysis (FEA) using I-DEAS and MSC/NASTRAN on Programs included AH-64A TADS, F-16 LANTIRN, and ATARS Minipod. Test engineer on classified programs.</p>

Additional

Computer Aided Design (CAD) Related:

Blogger for PTC:

- CAD Thought Leadership <https://www.ptc.com/en/cad-software-blog>
- Mathcad <https://www.mathcad.com/en/blogs>

Personal Website: www.creowindchill.com

YouTube Channel: www.youtube.com/CreoParametric

Additional software: Onshape, Creo Direct, SolidWorks, and Siemens NX

Presentations

- “Digital Engineering: CADministration Perspectives from the Worlds of Drones, Rockets, and Consumer Electronics,” LiveWorx, June 2019, Boston MA.
- “Real-Time Simulation and What It Means for the Design Engineer,” LiveWorx, June 2019, Boston MA.
- “2020 Vision,” Keynote Presentation, PTC/User Technical Community Winter Conference, January 2020, Scottsdale AZ.
- “Creo Parametric Implementation and Administration for 2020 and Beyond,” LiveWorx, June 2020, Virtual.
- “Driving CAD with Mathcad,” June 2020, PTC Mathcad Conference, Virtual.
- “Planning Your Model Based Journey,” Panel Moderator, March 2021, Virtual.

Certifications

- Certified Six Sigma Yellow Belt (American Society for Quality)
- Certified Scrum Master (Scrum Alliance)
- CompTIA CTT+ Certified Technical Trainer
- CM2 (Configuration Management) Comprehensive Certification – Institute for Process Excellence
- Completed AS9100:2016 (Rev D) Internal Auditor Training course – Probitas

Professional Memberships:

- American Society of Mechanical Engineers (ASME)
- American Society for Quality (ASQ)
- American Institute for Aeronautics and Astronautics (AIAA)

Personal

Educational Counselor for MIT Admissions Department