

Contact

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Top Skills

User Interface Design

Claude Code

PyQt

Certifications

Introduction to Git and GitHub

Intermediate DAX & Time Intelligence

IBM Data Science Specialization

Data Analysis and Visualization with Power BI

Advanced Data Visualization with Tableau

Patents

PDU with Front Side Access to Transformer Compartment

Electrical Cabinet Service Door with Integrated Deadfront

C. Morgan Davis

415-729-5387 | Experienced Data Professional | Active DoD Secret Clearance

Dayton, Ohio, United States

Summary

Mobile: 415-729-5387 | Active DoD Secret Clearance

Experienced data professional with data analysis, model development, and database administration experience in the aerospace, defense, automotive, data center, consumer bedding, and medical industries. 16+ years of hands-on, customer-focused, and profit-oriented experience.

My Top Clients include: Air Force Research Laboratory (AFRL), NASA, Northrop Grumman, Delta Faucet Company, Tribar Manufacturing, Costco Wholesale, Walmart, WestRock, Bureau of Printing & Engraving

Experience

Penn State University

Graduate Student

January 2026 - Present (2 months)

World Campus

Pursuing a graduate degree in Data Analytics - Big Data Systems Option.
Expected Completion Date: May 2028

Courses Taken:

DAAN 545: Data Mining

STAT 500: Applied Statistics

ARA

CAD Engineer for Computational Physical Sciences

2023 - 2025 (2 years)

Centerville, Ohio, United States

Duties:

- Development of CAD models for aerospace and defense applications.
- CUBIT scripting for production of simulation-ready mesh files.

- Python API scripting for input of electromagnetic simulation boundary conditions and excitations.
- Batch, Bash, and PBS scripting for running simulations on distributed computing platforms.

Company Background:

Applied Research Associates, Inc. is an employee-owned international research and engineering company recognized for providing technically superior solutions to complex and challenging problems in the physical sciences. The company, founded in Albuquerque, NM, in 1979, currently employs over 2,000 professionals. ARA offices throughout the United States and Canada provide a broad range of technical expertise in defense technologies, civil technologies, computer software and simulation, systems analysis, environmental technologies, and testing and measurement. The corporation also provides sophisticated technical products for environmental site characterization, pavement analysis, and robotics.

Aerobiotix

Development Engineer & SolidWorks PDM Administrator

2021 - 2023 (2 years)

Miamisburg, Ohio, United States

Duties:

- Design and development of medical-grade electronic air handling technologies. Created multiple portable vacuum systems that use UVC light and composite-media filtration cartridges to remove biological, chemical, and particulate contaminants from intake air.
- Development and administration of engineering macros and engineering change workflows for SolidWorks and SolidWorks PDM.

Company Background:

Aerobiotix, Inc. develops and manufactures environmental management devices for use in institutional healthcare, home health, and commercial settings.

Rack Processing Company, Inc.

Senior Design Engineer / Sales Engineer

2019 - 2021 (2 years)

Dayton, Ohio

Duties:

- Engineering, sales, costing, and pricing of custom electroplating and painting process racks.
- Continuous improvement and cost reduction of existing rack products as well as internal company processes.
- Sales support including customer design consultation, cost estimation, quotation, and GlobalShop ERP BOM / work order generation.

Company Background:

Rack Processing Company designs and produces custom plating-on-plastics (POP) racks for the automotive industry. The company has grown from a small business in Dayton, Ohio to one of the largest designers and manufacturers of customized racks in the world. That tremendous growth is driven by their ability to stay ahead of new manufacturing, design, and safety techniques. The company's foundation as a family-owned business drives them to cultivate strong relationships with customers, vendors, and employees. They make your finishing processes more efficient and profitable by leveraging advanced technology and ongoing training.

Power Distribution, Inc.

Mechanical Engineer III & PDM / CAD Administrator

2015 - 2018 (3 years)

Richmond, Virginia

Duties:

- Engineered data center power distribution products including PDUs, remote power panels, static transfer switches, and tap-off boxes.
- Release and revision control of product BOMs and work orders in Made2Manage ERP.
- Administration of engineering design software including SolidWorks, SolidWorks PDM, AutoCAD, Altium, and Arena.
- Designed SolidWorks PDM datacards, workflows, and notifications for company's engineering change process.

Company Background:

PDI is a leading supplier of power distribution and monitoring solutions for data centers and other critical or high-value electrical systems. PDI is now a subsidiary under Eaton Corporation, with operating facilities in Virginia and California.

PDI provides expertise in consulting, design and manufacturing of power transformers and distribution systems, static switching, power monitoring, RF,

AC, DC, data signal and EMP protectors, as well as power quality engineering services.

Carpenter Co.
Research Engineer
2013 - 2015 (2 years)
Richmond, Virginia

Duties:

- Engineered polyurethane foam cushioning products for the consumer bedding industry.
- Statistics-based product claim development.
- Designed polyurethane foam fabrication tooling, including reaction injection molds, convolution rollers, and die punches.

Company Background:

Carpenter Co. is the world's largest producer of comfort cushioning products, supplying to bedding industry and retail giants such as Serta-Simmons, Tempur-Sealy, Select Comfort, Walmart, Costco, and many more. They help make your carpet cushier, your furniture cozier, and your bedding more plush.

TriMech
Applications Support Engineer
2010 - 2013 (3 years)
Richmond, Virginia

Duties:

- Technical support of SolidWorks design applications.
- Technical support, applications engineering, customer training, and service of Stratasys 3D Printers.
- CRM record-keeping in Netsuite CRM.

Company Background:

TriMech provides thousands of engineering teams with a range of 3D design and rapid prototyping solutions that work hand-in-hand from sketch to manufacturing.

They offer the entire SOLIDWORKS product portfolio, Stratasys 3D printers, rapid prototyping services and other engineering solutions servicing the East Coast from Maine to Florida. Through team development and strategic acquisitions, TriMech has grown to become one of the largest SolidWorks resellers in the world.

US Navy

Mechanical Engineer Intern

2009 - 2010 (1 year)

Quantico, Virginia

Duties:

- Reviewed contractor bids, production development, and validation testing for US Navy automotive technology acquisition programs, including the MTRV Trailer and Flat- Rack Refueler.
- Designed mechanical components and test equipment for the PM PUMA and Mobile Trauma Bay programs.

Organizational Background:

The US Navy Acquisition Intern Program is a rotational development program that equips interns with the skills and experiences needed to support technology acquisition programs. Interns get to work with a diverse team of armed services members, civilians and contractor support personnel, all united by a common purpose: to equip and sustain Navy operations with the most capable and cost-effective systems for current and future expeditionary and crisis-response operations.

Education

Penn State University

Master's degree, Data Analytics - Big Data Systems Option · (January 2026)

University of Maryland Baltimore County

Bachelor of Science - BS, Mechanical Engineering