



## Jim Bures

## Mechanical Engineer

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**OBJECTIVE:** To visualize, design, model, and document complex engineering products

### SKILLS AND EXPERIENCE SUMMARY

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- 14 years' experience in Mechanical Engineering and Design, Manufacturing and Documentation
- Design from conception through parametric CAD modeling and drawing creation
- Led engineering department of startup company through successful acquisition of their technology
- Creo/ProEngineer (12 years), Windchill/PDM (12 years), AutoCAD (10 years), Solidworks (3 years)

### ENGINEERING EXPERIENCE

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**Raytheon Technologies**, Marlborough, MA (Defense) 2019 - 2022

Senior Technical Support Engineer / Mechanical design and documentation of various radar equipment.

- Designed and documented portions of the Array Structure for AMDR Flight IIA Naval Radar.
- Converted 2D winter enclosure drawing into 3D structure and verified fit over existing radar through a combination of AutoCAD and Creo.
- Updated large assembly drawings, small part drawings and mid-sized assemblies and drawings.
- Released drawings and wrote ECOs using Windchill/PDM, working interdepartmentally.

**EndoEvolution**, Wrentham, MA (Medical Devices) 2017 - 2019

Product Engineer / Mechanical and manufacturing support of the Endo360° laparoscopic suturing device.

- Manufacturing solutions: added spring to device to prevent cable breakage at tip; developed test protocol and extensively tested this solution to ensure ISO 13485 compliance. One year later, the cable breakage was no longer an issue.
- Organized cluttered Solidworks database from multiple locations to one directory. Assembled 80+ part assembly models. Designed configurations of parts and assemblies. Updated drawings.
- Documented repair procedures with photos. Created and implemented ECOs. Processed RFQs.
- Led weekly team meetings, vendor conference calls, and presented our technology to acquirers.
- Updated Graphic Design documents and website with Adobe InDesign, Photoshop and Illustrator.

### CAREER INTERMISSION

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**Various Companies**, Greater Boston Area, MA 2012 - 2017

Worked a variety of part-time / full-time positions; pursued engineering education at community colleges.

### GRAPHIC DESIGN EXPERIENCE

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**All for the Lord Graphic Design**, Still River, MA 2008 - 2012

Freelance Graphic Designer / Marketed and networked for business. Designed professional design solutions and supervised vendor selection and printing for clients. Created collateral: brochures, postcards, ads, tee shirts, logos, cartoons, and websites, using original and stock photography.

## PAST ENGINEERING EXPERIENCE

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- Medica**, Bedford, MA (Contract - Medical Devices) 2007  
Mechanical Detailer / Processed ECOs, created assembly drawings and parts lists for blood gas analyzers.
- InDepth Design**, Lawrence, MA (Contract - Semi-Conductor Equipment) 2006 - 2007  
Mechanical Designer / Led the design and detailing of two semiconductor projects. Supervised a second drafter and assisted with design reviews.
- Raytheon**, Marlborough, MA (Defense) 1999 - 2006  
Mechanical Engineer / Designed, modeled, documented, and supported manufacture of radar equipment.
- Led an interdisciplinary team to design an electromechanical assembly by selecting off-the-shelf components to reduce unit costs by \$1,000 from initial machined design.
  - Streamlined synthesizer frame design and documentation process from eight to four weeks.
  - Designed tempest keypad assembly with brazed case and off-the-shelf parts. Negotiated vendor tooling charges and prices. Researched and selected EMI gaskets and display windows.
- Schwarzkopf**, Franklin, MA (Contract - Rare Metals Manufacturer) 1998 - 1999  
Mechanical Designer / Led design and documentation of 200+ part heat shield products.
- Various Companies**, MetroWest, Boston, MA (Contract Positions) 1996 - 1998  
Mechanical Designer / Modeled and documented laser products, semi-conductor equipment and robotics.

## EDUCATION

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- Tufts University – School of Engineering**, Medford, MA 1995
- Bachelor of Science in Mechanical Engineering, *Magna Cum Laude*
- Mount Wachusett Community College**, Gardner, MA 2011
- Associate of Science in Computer Graphic Design, *Highest Honors*

## MUSIC ([www.zedek73.com](http://www.zedek73.com))

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- ICON Collective**, Online / Burbank, CA 2023
- Online Music Production Intro Course (Ableton I & Groove Theory I, Arrangement, Keyboard Techniques I)
- Berklee Online**, Online / Boston, MA 2021
- Online Ableton Live Fundamentals Class
- MMMaven**, In Person / Cambridge, MA 2018
- Music Production 101 / 102 Classes

## VOLUNTEERING

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- Charity Fundraisers**, MetroWest, Boston, MA  
Fundraiser / Raised \$40,000+ over 24 years: walks, bike rides and runs for hunger, cancer, community service, veterans, and mental health.

## INTERESTS

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Electronic music, writing, cartooning, graphic design, travel, philanthropy, and faith

[www.AllfortheLord.com](http://www.AllfortheLord.com)