

# Matthew Tavares

<http://M.atthew.com>

Battle-hardened and seasoned Mechanical Design professional with extensive experience and demonstrated experience in Mechanical Design, Mechanical Engineering, Consultative and Technical Sales Support, Prototype and Production Fabrication. Adept in identifying and proposing innovative solutions to meet client requirements. Inspiring leader with a track record of skillfully managing high performing teams to achieve aggressive project objectives. Strong interpersonal skills proficient in nurturing stakeholder relationships and communicating effectively with clients, management, vendors and other engineering resources. Matt lives in Dallas, likes to rock climb, build BattleBots, and speaks survival Spanish.

## SOFTWARE

Over 10 Years:

Solidworks • Matlab • Autocad • Linux  
Microsoft Office • Photoshop • Windows  
Illustrator • HTML • CSS •  $\text{\LaTeX}$  • Mac

Over 3 Years:

EPDM • Solidcam • GCode • Inventor  
Rhino • InDesign • PHP • Java • C • C++

Familiar:

OnShape • Sketchup • Labview • OpenCV

## LINKS

Portfolio:// [M.atthew.com](http://M.atthew.com)

Blog:// [TavaresLabs.com](http://TavaresLabs.com)

Twitter:// [@MatthewTavares](https://twitter.com/MatthewTavares)

LinkedIn:// [MJTavares](https://www.linkedin.com/in/MJTavares)

Github:// [MattTavares](https://github.com/MattTavares)

## AWARDS

2009 1st Battlebots (mentor)  
2008 2nd BotsIQ 15lb  
2007 Texas Hall of Heroes  
2007 1st BotsIQ  
2007 Best Engineered Bots IQ  
2007 Xerox Creativity FIRST  
2006 2nd FIRST Regional  
2006 Eagle Scout  
2005 Best Engineered BattlebotsIQ  
2004 Coolest Robot BattlebotsIQ

## ROLES

2009 President-UTD IEEE Robotic Society  
2008 Founded-UTD Combat Robotics  
2007 Captain-RHS Robotics Team  
2006 Co-Captain-RHS Robotics Team

## EDUCATION

### UTDALLAS

MECHANICAL ENGINEERING  
Richardson, TX

### RICHARDSON MAGNET HS

Richardson, TX

## EXPERIENCE

### PAUL BERNHARD EXHIBIT | INTERACTIVE AND MECHANICAL DESIGN

Oct 2015 – Present | Plano, TX

- Create interactive exhibits that illuminate scientific and industrial concepts effectively to the general public in amazingly fun and new ways
- Learn from the collective experience of a diversely skilled, enormously talented, and endlessly creative team of people at Paul Bernhard Exhibit
- Mechanical design of several large museum interactive exhibit projects
- Telecommuting from home office in Plano, TX via daily videoconferencing and 3D printing with frequent trips to both Austin and Houston PBE locations

### VERCÉT LLC | MECHANICAL RESEARCH AND DESIGN

Jul 2009 – Sep 2015 | Carrollton, TX

- Oversee complete mechanical product design cycles of more than 20 projects with a focus on geophysical exploration recording systems and equipment, undersea solutions, industrial manufacturing, and high volume manufacturing.
- Implement and maintain company drafting and part numbering standards
- Travel overseas to train colleagues to use the SolidWorks software suite
- Diagnosed and repaired all damaged Data Taxis for two years before writing repair documentation and training an off-site facility to take over the repairs
- Administrate SolidWorks Enterprise PDM, as well as other IT business services
- Design and maintain three websites including Vercét's primary web presence.
- Use SolidCam and write g-code to manufacture parts, fixtures, and tooling on a Haas VM3 mill with 5th Axis and multi-spindle TL-15 Lathe

### DRS TECHNOLOGIES | COOP MECHANICAL ENGINEERING

Jan 2009 – May 2009 | Richardson, TX

- Design mechanical systems used in the automated manufacturing process of infrared sensors
- Learn and use Pro/ENGINEER Wildfire 4.0 in conjunction with TeamCenter
- Adhere to strict military standards and specifications for all parts of design
- Create GD&T part drawings and files for manufacturing

### HANSON ROBOTICS | ROBOT ENGINEER

Apr 2007 – Sep 2008 | Richardson, TX

- Key responsibilities include electrical and mechanical design and manufacturing of the Robo-Kind and Human-Kind product lines.
- Utilize Solidworks to design, build, and evaluate mechanical systems.
- Developed and implemented the electronic architecture of the Zeno robot
- Travel and present at trade-shows and conferences such as NextFest and AAAI
- Collect data, prepare, and publish datasheets on robot specifications such as power consumption, sound output, and proprietary material properties
- Installed Zeno exhibit at Museum of Science and Industry; trained employees to use several of the robots' mechanical systems safely and effectively
- Co-Published a paper titled "Zeno: a Cognitive Character" at AAAI-08 Chicago