Bradley L. Tudor

640 W4th Street Unit: 111, Long Beach CA, 90802 - Phone: 574-220-7629 - Email: B6tudor@gmail.com

QUALIFICATIONS SUMMARY:

Full-Stack Developer: Experience in MERN stack. Completed projects in Full-Stack Web, IOT, Mobile-Device Accessories, and Automation

Mechanical Engineer: 10 years of industry experience successfully leading projects. Specifically in cradle to grave new product development, continuous product improvement, process automation, manufacturing \ support and warranty analysis. Experienced in new employee training \ mentorship. Also extremely proficient in 3d modeling, with good knowledge of FEA, CFD simulation and computer programming.

SOFTWARE DEVELOPMENT

HIGHLIGHTED SKILLS

Node	Express	React	Redux	Apollo	GraphQL	HTML
CSS	SCSS	MongoDB	RabbitMQ	Regex	RESTful API	AWS S3
Jest	Enzyme	JWT	PostMan	React Native	AJAX	HTTP

EXPERIENCE

Full-Stack Developer June 2017 – Present
Self-Employed (Torrence, CA)

Completed Projects:

- Title: GrowCtrl
  - Description: IOT Automated Greenhouse control and data logger.
  - Involvement: Frontend developer, Backend developer
  - Tech Stack: Node, Express, GraphQL Yoga, React, MongoDB
  - Url: http://growctrl.herokuapp.com/
  - Git: https://github.com/Brad-Tudor-Eng/GrowControl
  - Demo Credentials: *Available on request*
- Title: WingMan
  - Description: In-flight navigational aid for wingsuit pilots Garmin Fenix 3
  - Involvement: Accessory developer
  - Tech Stack: C-Monkey
  - Git: https://github.com/Brad-Tudor-Eng/WingMan.git
- Title: ReSplash
  - Description: UnSplash Clone. Image search with mason style grid layout.
  - Involvement: 100% of code base.
  - Tech Stack: React, SCSS
  - Url: https://resplash.bradtudor.com/
  - Git: https://github.com/Brad-Tudor-Eng/ReSplash.git
- Title: Gnar Guides
  - Description: Sample page layout
  - Involvement: Frontend Developer
  - Tech Stack: HTML, SCSS
  - Url: https://gnar-guides.bradtudor.com/
  - Git: https://github.com/Brad-Tudor-Eng/GnarGuides.git
- Title: Cam Shaft Reverse Engineering
  - Description: Developed proprietary software to reverse engineer diesel camshafts. Data was taken from a series of linear encoders, processed, then eventually rendered as a 3d-Model in Solidworks
  - Involvement: Lead engineer
  - Tech Stack: VBA
- Title: CAD Automation for Stewart Filmscreen
  - Description: Programmed API's, and macros for 3d-CAD automation
  - Involvement: Lead engineer
  - Tech Stack: VBA, SQL, JavaScript

MECHANICAL ENGINEERING

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HIGHLIGHTED SKILLS

Project management	New product development	Process Improvement	Training and Leadership
Solidworks	VBA Programming	Rapid Prototyping	Plastics Design and Processing
FEA Analysis	Metrology	CFD Simulation	ASME Y14.5-2009 GD&T

EXPERIENCE

Mechanical Engineer May 2017 – Present
Stewart Filmscreen (Torrence, CA)

Responsibilities: Set Engineering department standards. New Product Development (Consumer Goods). Redesign existing products reducing manufacturing time and cost. Automate Engineering drawing process. Develop costing for all products. Improve manufacturing process efficiency. Advise senior management on corporate improvement projects.

Achievements:

- Designed and developed award winning product in less than 3 months.
- Automated process to convert over 5000 CAD files from Inventor 2013 to Solidworks 2017 in less than 2 weeks.
- Reduced Engineering labor though the automation of drawing process and BOM generation saving over $60k.
- Provided accurate cost for current products though development of automated costing templates.
- Spear headed cross functional initiative to get quick-ship program back on track
- Reduced inventory and condensed product line by developing one product to replace 5.

Product Development Engineer Sept 2012 – Apr 2017
PAI Industries (Atlanta, GA)

Responsibilities: New product design and development (Cast metal, machined, plastic injection molded and composite parts). Foreign and domestic supplier acquisition, and management. Design of new equipment and testing procedures to reduce warranty cost by ensuring product compliance. Research and acquire new capital resources to expand manufacturing capabilities and lower production cost. Design validation through 3D modeling, FEA and CFD simulation. Prototype construction and 3d printing. Engineering data management. Physical product testing. PPAP / FEMA documentation and testing. Developed creative solutions for allowing sales staff to convey technical information simply and cost effectively. Advise senior management on nonconforming products. Audit internal ISO processes. Engineering presentations for improving customer relations. Training and mentorship of engineering staff.

Achievements:

- Decreased engineering development time up to 75% though implementation of 3d Laser scanning / employee training.
- Reduced product assembly time by up to 83% through new fixture development.
- Developed, sourced and launched extremely successful high performance product line.
- Cut production cost of HP Pins by 50% though purchase of new equipment with 4 month ROI.
- Created a new system to organize the engineering data, reducing redundant work, lost / duplicate files, and confusion.

S-Body/Product Engineer Dec 2010 – Sept 2012
Supreme Corporation (Goshen, IN)

Responsibilities: Set base standards for 70% of the Supreme Corporations' truck divisions' product line. Designed and implemented improvements for cost reduction, ease of manufacturing and structural integrity. Provided technical support for sales and manufacturing at 5 locations nationwide.

Achievements:

- Strengthened key support structure by 85% while using 35% less part.
- Diminished total inventory by 45% through development of common parts across product lines.
- Employed improvements in product design resulting in a 20% reduction in fasteners and automation of assembly line.
- Reduced corporate losses by leading engineering changes to correct warranty and manufacturing.
- Boosted sales thought technical support and production of custom designed units on a tight schedule.
- Increased engineering output and corporate profits through training and supervision of new employees.

Engineering Manager Feb 2009 –Dec 2010
Marson International/Quality Fuel Solutions/Pit Stop Products (Elkhart, IN)

Responsibilities: Supported manufacturing thought the design, sourcing, assembly and inspection of welding fixtures. Developed coordinates for CNC tubing process. Worked with Senior Management to develop new products (Automotive and Consumer Goods). Used 3d CAD to develop engineering documentation. Trained and managed 1 employee.

Achievements:

- Improved weld fixture accuracy and inspection procedures though enhanced use of FARO technology.
- Cut weld fixture production cost by reducing assembly time though innovative design.
- Successfully designed, built fixtures for and launched new deck railing system for recreational vehicles.

Automotive Engineering Internship (Paid) Dec 2006 – July 2008
Summit Polymers (Portage, MI)

Responsibilities: Worked with project engineers to ensure successful on time development of plastic injection molded and composite products.

Achievements:

- Used root cause analysis to effectively solve warranty issues for major automotive companies.
- Reduced design cost by hand building functional prototypes to expedite testing of design changes.
- Successfully met tight prototype delivery deadlines by training and managing teams of up to 8 people.
- Cut production cost though implementation of new corporate design standards.

EDUCATION

Bachelors of Science in Engineering, December, 2008
Western Michigan University, Kalamazoo, MI

Associate of Applied Science, May 2006
Southwestern Michigan College, Dowagiac, MI

Solidworks Professional Training in CFD / FEA / Sheet Metal / Weldments

Geomagic Design X Professional Training

Faro Edge Cam 10 Measure 2 Professional Training

PERSONAL ACHIEVEMENTS

Graduated from Western Michigan University with honors and highest GPA in major.

Certified Solidworks Professional

NAUI Dive Master Certification

USPA IAD Instructor Certification

PERSONAL REFERENCES

Programmers

Marc McDougall
Kilobyte Studios
Email: marc@kilobytestudios.org

Dan Hite
Email: danhite@me.com

Managers

Dean Weldy
Supreme Corporation Director of engineering- National Fleets
Cell Phone: 574-202-1695
Emails: Weldydean@gmail.com

Co-Workers

Kevin Mcglynn
Mechanical Engineer at Stewart Filmscreen
Personal Phone: 310-462-5465

John Harris
Development Engineer at Yamaha Motor Corporation, USA
Personal Phone: 404-579-2642
E-mail: john.harris16@gmail.com

Jim Thelen
Assembly Manager at PAI Industries
Personal Phone: 678-699-7012