

# MIKE THIELVOLDT

DEEP-STACK DEVELOPER

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[Website](#)

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Veteran mechanical engineer and hardware hacker seeking embedded engineering opportunities.

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## PROFICIENCIES

Javascript ES6  
HTML5 / CSS3  
React  
MongoDB  
PostgreSQL  
Nginx  
C  
C++  
Python3  
Atmega, PIC

Git  
Linux/Unix admin

PCB design / layout  
Mechanical design  
CAD (Solidworks)  
Prototyping

## PATENTS

Music-reactive fire display  
[US8823714B1](#)  
(licensed)

Finger-operated accelerator  
[US9746872B2](#)

## EDUCATION

2007 Stanford University  
Masters, Mechanical Eng.  
*Energy Systems Concentration*

## PROJECTS

### Portfolio Project - [ListPalette.com](#)

May. 2020 – Present | Albany, CA  
Personal project exploring tree structures in web app context.

### Portfolio Project - [LitelInvite.com](#)

Mar. 2020 – Present | Albany, CA  
Personal project exploring full web stack, with focus on UX

### Math/Science Tutor - [Bay Area Learning Partners](#)

Oct. 2018 – Aug. 2019 | Menlo Park, CA  
Tutored college chemistry, high school math, test prep.  
• Dramatically improved student scores and helped scale.

### Flame Effect Product Engineer - [LiveSpark, Inc.](#)

Oct. 2008 – Jul. 2018 | San Francisco, CA  
VP, Engineering building novel 'high definition' flame effect.  
• Owned most technical aspects of core-product development from concept to early production.

### IoT Fish Feeder - Contractor for [Brunet Lab - Stanford](#)

Jul. 2017 – Sept. 2017 | Stanford, CA  
Micropython on ESP-32 with PIC slave for sensor, actuator drive + video. Monitoring over MQTT  
• Delivered system revision to support ageing research

### Automotive Engine control project: - [ECUality1](#)

Sept. 2015 – Oct. 2019 | Palo Alto, CA  
Implemented open-source ECU: C++ on 8-bit microcontroller  
• Vastly improved emissions, power and mileage over stock

### Watersport light - [AquaVolta LLC](#)

Sept. 2015 – Dec. 2017 | Martinez, CA  
Concept to qty-300 of novel action-sports lighting equipment  
• Website design  
• Wrote firmware in C for extreme-low-power electronics.

### Biomass Feed System - [All Power Labs](#)

Feb. 2014 – Aug. 2014 | Berkeley, CA  
Wrote safety-critical industrial automation firmware and designed hardware for semi-autonomous biomass gasifier.  
• Concept to production, integrating quickly with team.