

JARED BACKOFEN

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EDUCATION

University of Colorado, Boulder MS Electrical Engineering	Boulder, CO 2021 - 2023
University of Colorado, Colorado Springs BS Electrical Engineering <i>GPA: 3.44</i>	Colorado Springs, CO 2016 - 2020

WORK EXPERIENCE

DSPTronics <i>Firmware Engineer</i>	Colorado Springs, CO Feb 2021 - Present
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- Assisting in project planning, contract development and engineering.

Zwipe <i>Firmware Engineer Intern</i>	Colorado Springs, CO May 2019 - Nov 2019
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- Optimized fingerprint sensor for ultra-low power.
- Developed a 99.97% accuracy fingerprint authentication algorithm.

University of Colorado, Colorado Springs <i>Teaching Assistant</i>	Colorado Springs, CO Aug 2018 - Dec 2018
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- Worked with students in the design and development of AM radios.
- Led study sessions and graded assignments.

Symetrix Corporation <i>Materials Science Intern</i>	Colorado Springs, CO Jun 2017 - Aug 2017
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- Utilized an Atomic Force Microscope to capture and present surface and electrical measurements on a newly developed semiconductor memory device (CeRAM).

SKILLS

Programming Languages:	C/C++, Python, Java, MATLAB, HTML, CSS, JavaScript, Git, MySQL
Programming Tools:	Jupyter, VS Code, IAR, Eclipse, Linux, Android Studio, more...
Equipment:	Oscilloscopes, Signal Generators, Logic, Network, Spectrum Analyzers, Soldering

PROJECTS

Geaux Audio <i>WordPress, Linux, MySQL, Apache</i> An engineering consulting firm.	https://www.geauxaudio.com
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Audio Equalizer *C, Python, Xojo, ARM Cortex M4*
A real-time multiband parametric equalizer.

Keyword Detector *Python, TensorFlow, Jupyter Lab*
A machine learning algorithm that listens for the keywords "Hey OpenHear!" in real-time.

Fingerprint Authenticator *Python, TensorFlow, Jupyter Lab*
A deep-learning algorithm capable of correctly identifying fingerprints at a 99.97% accuracy.

Xylophone App *Java, Android Studio*
An Android app that lets users jam out on a Xylophone!