Jacob Honer

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EDUCATION:

Michigan State University | East Lansing, MI   Graduation: **2027** | Graduate GPA: **3.916/4.0**
Ph.D. in Electrical and Computer Engineering (ultrasound focus)

Michigan State University | East Lansing, MI   Graduated: **2022** | Undergraduate GPA: **3.96/4.0**
Bachelor of Science in Electrical Engineering + Minor in Spanish

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SKILLS*:*

- Proficient in C, C++, OpenMP, MPI, MATLAB, Mex, and CUDA.
- Proficient in Java and Android Development
- Working knowledge in Cadence Virtuoso, Keil µVision IDE, and ARM programming language
- Proficient in PSPICE
- Proficient in Advanced Design System by Keysight Technologies for RF related circuit design
- Proficient in soldering and basic circuitry
- Working knowledge in CAD (Autodesk Inventor / Fusion 360)
- Working knowledge in HTML, CSS, JavaScript, PHP.
- Working knowledge in Flutter and Dart
- Limited knowledge in Amazon Web Services (AWS)
- Proficient in video editing on Final Cut Pro

NOTABLE GRADUATE COURSEWORK:
- Analysis of Stochastic Systems
- Detection & Estimation Theory
- Advanced Electromagnetic Fields and Waves I
- Parallel Computing
- Modeling Methods / Parameter Estimation
- Analog & Digital Communication

NOTABLE UNDERGRADUATE COURSEWORK:
- Microprocessors & Digital Systems
- Circuits and Systems, I, II & III
- RF Electronic Circuits
- Control Systems, Digital Control
- Signal Processing, Digital Signal Processing
- Acoustics
- Digital Logic Fundamentals
- Programming in C

RELEVANT EXPERIENCE:

Research Assistant | East Lansing, MI   January 10, 2022 – Present
- Accelerated FOCUS (www.egr.msu.edu/~fultras-web/) through C++, OpenMP, Mex, and CUDA programming.
- Ensured cross-compatibility of FOCUS for Mac, Windows, and Linux operating systems, resolved memory leaks, handled general bug fixes, and managed lab websites.
- Created general purpose scripts for B-mode imaging and plane wave imaging simulations in FOCUS.
- Wrote OpenMP/MPI/CUDA code using HPC systems to solve numerical models and differential equations.

Engineering Technician and Assistant Manager at GENISAMA | East Lansing, MI   June 5, 2019 – May 6, 2022
- Collaborated with and coordinated employees from America, Vietnam, and China.
- Recruited and managed short term independent contractors to assist in company operations.
- Advanced company research through assisting in data collection tasks, creating visualization tools, and directly working on the mathematical formulas and analyses of the company's machine learning algorithms.

Professorial Assistant | East Lansing, MI   September 1, 2018 – April 26, 2019
- Helped to develop new techniques for the synthesis of nanostructures and other micro technologies, particularly related to gold, with the Plasmas and Nanomaterials Laboratory at Michigan State University.

Study Abroad Student | Valencia, Spain   January 8, 2020 – April 30, 2020
- Studied higher level Spanish, conversed with native speakers, lived abroad, and adapted to a new culture.

ACTIVITIES/LEADERSHIP:

- Co-founder and tutor for Pandemic Tutoring Services – a free tutoring service to help students during COVID 19.
- Organizer and Leader of Alpha Courses at Michigan State University.
- Mentor of undergraduate college students, via bi-weekly one-on-one meetings and discussion groups.
- International Baccalaureate graduate, and still active in the Farmington Hills community today.