Embedded Security Lab

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Type of Research Position:
- Graduate RA at the MS or PhD level
- Summer REU for undergraduates

Description of Research Project:

The Embedded Security group is a multi-disciplinary team exploring various aspects of the security of smart and connected "things" and their interactions with humans. This starts with the societal and technical requirements of ubiquitous applications such as Medical Devices, Payments, Autonomous Systems, and Critical Infrastructure (Power, Transportation, Finance,…), and extends to the enabling technologies of networks, cryptography, computer architecture and circuits.

Our Mission: from fundamental science and engineering, to user studies, our work strives to analyze and provide solutions to the challenges of security and privacy today and well into the future.

We design, experiment, measure, optimize, explore, through a wide range of technologies and test-beds including FPGA boards, mobile phone dev platforms, custom CMOS, simulations and higher level development systems.

- **Interdisciplinary -** Our lab is very interdisciplinary, working at the intersection of hardware design, computer architecture, embedded systems, networking and applications.

- **Entrepreneurial opportunities -** We are potentially looking for new people to start companies based on our technologies.

- **Diversity welcoming/friendly research group**: The lab consists of students and professionals from all over the US and the world. We pride ourselves on being an open and welcoming environment. Our group welcomes people of all religious, race/ethnicities, and socioeconomic backgrounds, and we are inclusive of all genders and LGBT identities.

- **International research opportunities:** We have active collaborations with U. Bochum Germany as well as ties to groups in France, Switzerland, Belgium, UK, Mexico and Korea. We also send students to international conferences to present their science.

Desired Qualifications and/or Background
Students with a background in most any STEM field are welcome. No previous research experience required, but we want people who are passionate about science and are driven to make a difference in people's lives.