Brian Schiffer

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Self-motivated professional who loves rapid prototyping while keeping the end application in mind. Creative engineer who thrives upon and quickly masters new challenges.

SKILLS

- C, MATLAB, C#, Python, Verilog, Assembly, Java, SQL, HTML, PHP, CSS, and JQuery.
- Familiarity with BLE, ARM, ATMEL, MSP430, and ALTERA.
- Circuit design, PCB design, fine-pitch soldering, and electrical test equipment.

EDUCATION

Cornell University, College of Engineering, Ithaca, NY
Bachelors of Science, *Electrical and Computer Engineering, 2012*
Kessler Fellow – a fellowship awarded yearly to select engineers pursuing entrepreneurial interests

PROFESSIONAL EXPERIENCE

Quanttus Inc., Cambridge, MA **2013-**
Sr. Systems Engineer

- First employee brought on by the cofounders to accelerate electrical prototyping.
- Developed firmware and electrical system of a wearable sensor platform through rapid iteration of my original designs, enabling data collection for monitoring of cardiovascular health.
- Led the design of the photoplethysmograph sensor, achieving minimal power consumption while maximizing signal quality.
- Collaborated with the algorithms and product development teams to identify device designs that maximize signal quality while reducing manufacturing complexity.
- Developed a continuous calibration routine to consistently achieve high signal quality on a diverse user base in a variety of environments.
- Modified device firmware to enable live streaming over BLE of all the device's sensors.
- Developed R&D prototypes, including a finger-tip sized device that measures heart rate using an accelerometer, and a weigh-scale that measures heart rate using load cells.

Zeo Inc., Newton, MA **2010-2012**
R&D Engineer

- Developed algorithms that extracted heart rate and respiration from a piezoelectric sensor.
- Evaluated potential partner companies' technology and sensors.

CES Exhibitor

- Developed a sleep-lab booth that displayed attendees' brainwaves and sleep stages, live.
- Built in automatic upload of the data to a website for attendees to view later.

Advanced Development Engineer Consultant

- Conducted initial technological and consumer research for non-contact sleep staging.
- Initiated and developed relationships with potential partnership companies.
- Developed proof-of-concept sleep staging algorithms that used heart rate and respiration.

Software and Firmware Development Intern

- Created firmware enabling access to live raw data, including brainwaves and sleep stages.
- Developed and documented a Python library to facilitate access to the raw data output.

Cornell University, Ithaca, NY **2009-2011**
Electrical Engineer: AUV (Autonomous Underwater Vehicle) team

- Head of the mechatronics sub-team.
- Team placed first in 2010 at the AUVSI RoboSub competition.
- Developed actuator and servo control board and accompanying firmware.
- Participated in numerous design reviews that enhanced quality of team designs.
- Mentored new team members in developing schematics and circuit boards.