Brian Sennett

Somerville, MA

EXPERIENCE:

Bose Corporation Framingham, MA

Design Engineering Leader, Professional Systems Division Sept 2019-present

- Manage small engineering team and coach direct reports for professional development
- Create and validate the overall product specification as project engineer
- Advocate for the Bose brand in the design and audio quality of our products
- Collaborate with engineering and category management to define technology platforms

Electrical Engineer, Professional Systems Division April 2017-Oct 2019

- Designed and tested analog, digital, and power electronics for professional audio
- Led international project teams in system integration and execution of product requirements
- Continuously improved interdisciplinary development processes and tools
- Analog/control engineer: PowerSpace versatile installed power amplifier series
- Lead electrical engineer: L1 Pro portable line array loudspeaker series

Electrical Engineer, PACE Rotational Program Jan 2015-March 2017

- Developed high-frequency power converter for automotive amplifiers
- Researched novel acoustical noise-reduction concept
- Created hardware and firmware development platform for next-generation headsets

Intern, Electronic Product Design, Home Entertainment Product Development June-August 2013

- Diagnosed issues (hardware and software) with SoundTouch wireless home speakers
- Initiated research guiding implementation of key feature on SoundLink Mini II Bluetooth speaker

Intern, Research and Advanced Development, Noise Reduction Technology Group June-August 2012

- Designed major revision of circuit board for prototyping next generation of audio control circuit
- Created and supervised extensive testing with critical listeners to evaluate audio target curve

WMBR-FM Radio at MIT Cambridge, MA

Technical Director and Chief Operator Sept 2014-present

- Volunteer role as part of management board of MIT's college radio station
- First responder for repairing critical on-air equipment in both studios and FM transmitter systems
- Gather feedback from volunteer on-air staff to improve existing equipment and design new technology to make professional-quality radio shows easier to produce
- Responsible to the FCC for ensuring legally compliant operation of transmitter, antenna, and tower
- Lead and train a team of 5-10 technical staff volunteers

Project Lead, Tower and Antenna Relocation June 2016-June 2021

- Coordinated $100K capital project to move FM transmitting facilities to new MIT-owned building
- Led long-term FCC/FAA permitting and coverage plan and subsequent rapid build-out of new facility prior to scheduled demolition of building hosting previous facility
- Designed transmitter, antenna, and monitoring system and coordinated with architectural and construction firms to erect radio tower on roof of new building, the highest point in Cambridge

Laboratory for Electromagnetic and Electronic Systems, MIT Cambridge, MA

Graduate Researcher Sept 2013-Dec 2014

- Investigate presence-sensing technologies using capacitive electric-field sensors

Undergraduate Researcher Jan 2011-June 2013

- Designed, manufactured, and tested printed circuit boards for class demonstration devices
- Implemented hardware and algorithms for water-use monitoring system

Department of Electrical Engineering and Computer Science, MIT Cambridge, MA

Teaching Assistant, Power Electronics Lab and Microcomputer Lab Sept 2013-Dec 2014

- Plan coursework, develop lab equipment, and assist students in lab for two classes

MIT Formula SAE Team Cambridge, MA

Electronic Systems Lead Sept 2011-Dec 2014

- Design the control system for MIT's first FSAE Electric vehicle
- Oversee electronics team and work closely with many engineers from other disciplines

EDUCATION:

Massachusetts Institute of Technology (MIT) Cambridge, MA

Bachelor of Science in Electrical Science and Engineering May 2013

GPA 4.6/5.0

Master of Engineering in Electrical Engineering and Computer Science December 2014

SKILLS:

Languages: English (fluent), Spanish (conversant), Mandarin Chinese (beginner)
Software tools: MATLAB, assembly, C, Altium, Cadence Allegro DE and Virtuoso, SPICE
Musical: Violin, piano; classical and jazz styles; experience with live and studio music technology

ACTIVITIES AND INTERESTS:

WMBR radio station (weekly radio show); rock, folk, and jazz bands; hiking and mountain biking; skiing