

Jason Wright

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Skills

- circuit design
- schematic capture
- PCB layout
- embedded systems
- firmware development
- RTOS development
- sensor characterization
- hardware debug
- algorithms
- signal processing
- data analysis
- web development

Languages

- C/C++
- Python
- MATLAB
- JavaScript
- Verilog

Chipsets

- TI/MSP430
- Nordic/nRF5x
- Atmel/AVR
- STM32

Regulatory

- 21 CFR 820
- ISO 13485
- ISO 62304
- IEC 60601
- FCC Part 15

PROFILE

Electrical & embedded systems engineer concentrated in health technology and medical devices, with 8 years of experience in roles spanning hardware design, embedded firmware development, systems integration, and project management.

EXPERIENCE

Electrical Engineer, Feinstein Institutes for Medical Research / Northwell Health

Manhasset, NY — 2019—present

Within the Institute for Bioelectronic Medicine, designed and built the first closed-loop wireless neuromodulation implant for chronic use in mice. For research projects and clinical trials within Feinstein, designed and built laboratory instrumentation for fast-scan cyclic voltammetry, high-frequency neurostimulators, biosignal amplifiers, and data acquisition devices.

Electrical Engineer, MedicaSafe New York, NY — 2016—2019

As the sole electrical engineer at a small medical device startup, led hardware development for a portable, connected, and secure medication dispensation system through a clinical trial, early volume manufacturing, human factors testing, and ISO 13485 documentation in preparation for FDA Class II 510k submission.

Systems Engineer, Intel Santa Clara, CA — 2015—2016

Developed proof-of-concept hardware for Intel Edison applications, leveraging a wireless x86 compute module for wristband wearables, sports activity trackers, “smart garments”, and connected air quality sensors.

Rotation Engineering Program, Intel Santa Clara, CA — 2013—2015

Various roles in product groups & research as part of a program for new graduates.

EDUCATION

M.Eng. Electrical & Computer Engineering, Cornell University, 2013
B.S. Electrical & Computer Engineering, Cornell University, 2012

SELECTED PUBLICATIONS & PATENTS

J. Wright et al., "A Fully Implantable Wireless Bidirectional Neuromodulation System for Mice." Cold Spring Harbor Laboratory, 02-Jun-2021 [Online]. Available: <http://dx.doi.org/10.1101/2021.06.02.446797>

T. Sun, **J. Wright**, and T. Datta-Chaudhuri, "Ultrasound powered piezoelectric neurostimulation devices: a commentary," *Bioelectron Med*, vol. 6, no. 1, Aug. 2020, <http://dx.doi.org/10.1186/s42234-020-00052-6>

J. Wright, J. Wong, Y.-C. Chang, U. Ahmed, S. Zanos, and T. Datta-Chaudhuri, "A low-power implantable neurostimulator for small rodents with functional validation," in 2019 IEEE Biomedical Circuits and Systems Conference (BioCAS), 2019, <http://dx.doi.org/10.1109/BIOCAS.2019.8919215>

M. Ervin, A. Nawrozie, **J. Wright**, and M. Dell, 2020. *Method, system and apparatus for guiding and tracking medication usage*. US20180240541A1.

S. Holmes, **J. Wright**, 2019. *Classifying collision events using inertial and audio data*. US10272324B2.

S. Shah, N. Sundarajan, M. Goel, B. Vogel, J. Blanchard, **J. Wright**, L. Krishnamurthy, S. Kar, 2018. *Dynamic effects processing and communications for wearable devices*. US20170177091A1.