David P Bradway

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INTERESTS

Front-end development, visualization, data hacking, and signal processing
Engineering role at cleantech startup Plotwatt in mid-to-late 2014

WORK EXPERIENCE

Technical University of Denmark (Kongens Lyngby, Denmark)

Postdoctoral Researcher, 2013 - present

- Developed OpenCL software for processing 3-D Doppler ultrasound data on the GPU
- Presenting work at conferences, doing clinical feasibility study, and working to publish results

Duke University (Durham, NC, USA)

Research and Teaching Assistant, 2005 - 2013

- PhD project using ultrasound to noninvasively measure the heart's mechanical properties
- Reviewed scientific literature and formulated research plans
- Organized and carried out clinical trials at Duke University Medical Center
- Presented results at conferences, published proceedings and co-authored articles

Siemens Healthcare (Issaquah, WA, USA)

Research Intern, 2008

- Worked within a busy team in a large, bureaucratic corporate environment
- Learned version control and automated build systems

EDUCATION

Duke University (Durham, NC, USA)

Ph.D. in Biomedical Engineering, May 2013

The Ohio State University (Columbus, OH, USA)

B.S. in Electrical and Computer Engineering, June 2005.

RELEVANT COURSE WORK

Digital Signal Processing
Circuits and Instrumentation
Image Processing and Analysis
Systems and Signals
Statistical Signal Processing
C/C++ Programming

HONORS AND ACTIVITIES

Whitaker International Program Scholar (2013)
National Science Foundation Graduate Research Fellow (2005 - 2008)
Goldwater Research Scholar (2004 - 2005)
Organized engineering design and build trip to Honduran orphanage (2004)

SKILLS

Fluent in several languages and technologies: C/C++, OpenCL, Matlab, MS Office
Used several more on projects: PHP, Ruby, Rails, Perl, Python, LabVIEW, flavors of SQL, HTML
Ability to teach self: for cover letter project learned Javascript (CanvasJS) and RWD CSS
Previous focus on signal and image processing, scientific programming and computing, simulation, experimental design, and statistical analysis
Self-motivated execution of a high-level plan with nominal oversight
Strong verbal communication, data visualization and presentation display skills
Successful writer of fellowships, scholarships, and grant applications

INTERESTS

TED5000 owner. Plotwatt user. Neurio backer. MS Hohm & Google PowerMeter ex-user
Creating tools to close feedback loops, to measure, effect change, and automate it
Personal 'hacking' in mobile/embedded systems: Arduino, Raspberry Pi, Android
Machine learning so computers help us make better informed decisions
Influencing and studying behavior. Economics, the Nudge Unit, Dan Ariely's work