BRIAN H. HULETTE

EDUCATION

M.Eng Electrical Engineering (DSP/Communications) - Virginia Tech **Projected December 2014**
Falls Church, VA - National Capital Region Campus
Coursework: Advanced Digital Communications, Radar System Design, Network Architectures and Protocols, Detection and Estimation Theory

B.S. Computer Engineering - Rose-Hulman Institute of Technology **May 2011**
Terre Haute, IN *Summa cum laude*
Coursework: Digital Signal Processing, DSP System Design, Communication Systems, Electronic Music Synthesis

EXPERIENCE

n~ask, inc. Signal Processing Systems **July 2011 - Present**
Associate *Fairfax, VA*

- Worked on tools for porting Software-Defined Radio (SDR) components into various frameworks.
- Developed, deployed, and debugged a system for automatic signal detection and classification. Detection information is stored in a SQL database which can be viewed by analysts using a custom Qt interface or a webpage.
- Contributed to an innovative set of Qt tools which allow analysts to view multiple sets of spectral data and identify common features between them.
- Currently developing a WebSocket interface for the next major version of X-Midas, an SDR framework used by the Intelligence Community, to bring signal analysis to the web.

Rose-Hulman Senior Project - Wireless Video Viewing Device **Aug 2010 - May 2011**
Student *Terre Haute, IN*

- Created an embedded transmitter receiver pair to transfer low bit-rate video
- Configured two TI DaVinci video processors to encode/decode an H.264 video stream and transfer it via our client's low bit-rate radios
- Made Kernel modifications and wrote C++ applications for data capture, transfer, and display

Duke University Center for In Vivo Microscopy **Summer 2010**
Undergraduate Research Assistant *Durham, NC*

- Developed algorithms in MATLAB to identify and measure spherical structures in extremely high resolution (15 μm voxels) 3D MRI data - lead to a publication
- Created visualizations of 3D brain, kidney and heart MRI data

TECHNICAL SKILLS

Areas of Interest: Digital Signal Processing, Communication Systems, Algorithm Development
Languages: Python, C/C++ , MATLAB, HTML/JS/CSS, SQL, LaTeX
Other: X-Midas, Linux, Windows, Mercurial, Subversion

PUBLICATIONS

L Xie, R Cianciol, B Hulette, H Won Lee, Y Qi, G Cofer, GA Johnson, Magnetic resonance histology of age-related nephropathy in the Sprague Dawley rat, Toxicologic Pathology 2012 Apr 13

HONORS AND ACTIVITIES

Member: IEEE, Eta Kappa Nu, Tau Beta Pi, Pi Mu Epsilon
Hobbies: Running, Guitar, Woodworking