

Stephen McGovern

Location: McLean, Virginia 22102
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SKILLS & ABILITIES:

- Ability to analyze data, perform numerical computations, design numerical algorithms including algorithms for DSP filters and feature extraction, and ability to display data visually (as in plots and graphs)
- Strong knowledge of C, C++, FORTRAN, and Matlab. Working knowledge of Java, C#, make, and the Matlab Signal Processing Toolbox.
- Proficiency with Windows, Linux, and Unix
- Ability to design and assemble custom desktop computers
- Proficient with MS Office and HTML. Familiar with LaTeX and CSS

DEGREES:

Bachelor of Science in Applied Physics, Stevens Institute of Technology completed May 2004, Dean's List

PAPERS:

“Fast Image Method for Impulse Response Calculations of Boxed-Shaped Rooms,” to be published in the journal *Applied Acoustics*, January, 2009
<http://2pi.us/FastImage.pdf>

“Synthesizing Sound By Using Computational Methods to Model a Series of Uncoupled Spring-Mass Systems,” (draft version),
<http://www.2pi.us/esynth/esynth.html>, 2007

“Simulating Room Reverberation By Means of a Mirror Image Acoustics Model,”
<http://www.2pi.us/rir.html>, 2003-2006

CERTIFICATES:

CompTIA Security+, awarded May 2008

WORKSHOPS ATTENDED:

DSP: Spectral and Physical Models
Center for Computer Research in Music and Acoustics
Stanford University, completed July 2006

Signal Processing Techniques for Digital Audio Effects
Center for Computer Research in Music and Acoustics
Stanford University, completed August 2006

COURSES:

Solid State Physics, Quantum Mechanics I-II, Materials, Electromagnetism, Intermediate Waves & Optics, Analytical Mechanics, Digital Signal Processing, Mathematical Analysis I-IV, Chemistry I-II, Quantum Physics/Relativity, Computational Physics, Circuits and Systems, Transport: Theory & Simulation, Modeling and Simulation, Mathematical Methods in Physics I-II, Biology & Biotechnology, Thermodynamics & Energy Conservation, Mechanics, Probability and Statistics, Modern Optics, Electricity & Magnetism, Programming in C++, Java

LAB EXPERIENCE:

Interferometers, Optical Fibers, Prism Tables, Diffraction Gratings, Spectrometry, Autocollimators, Potentiometry, Titration, Gas Chromatography, Calorimetry, Oscilloscopes

SCIENTIFIC INTERESTS:

digital audio, game physics, virtual reality, acoustics, object oriented scientific programming, geophysics, global numerical modeling

EXPERIENCE:

Nov. 2007 – Present: Systems Engineer in satellite communications at ARTEL Inc.