JOHN REGNER

Career Goal: Participate in a work culture where teamwork and creativity turn into quality software.

Work History

Astronautics Corporation of America – Software Verification Engineer *Oct 2012 - Present*

- Automated re-imaging of server and install of testing scripts to reduce testing time
- Designed tests and scripts for verification of a Linux Server and remote terminals
  - Identified requirements which needed new, improved, or modified tests
  - Documented testing procedures using MS Word, MS Excel, IBM DOORS
  - Wrote and modified testing applications and scripts in various language (C, C++, python, bash, SQL)
  - Executed tests and recorded results to ensure correct system performance
  - Highly proficient using and configuring Linux, Windows, SVN, Git, Emacs, and Vim

MIT Lincoln Lab – Air Defense Techniques Software Development Intern *2009 - 2011*

- Designed and built radar user interface in LabView and C#/WinForms
- Developed radar detection sub-components to target FPGA using Matlab/Simulink
- Confident working in a self-directed manner
- Implemented k-means clustering algorithm and associated graph to allow operator to determine approximate number and spacing of other radar systems operating in the same area

United States Navy – Aviation Electronics Technician *2003 - 2007*

- Analyzed and repaired faults in multiple systems on board the aircraft
- Supervised and delegated tasks to a team of 8 people
- Ensured team morale by being attentive and responsive to each persons strengths and weaknesses
- Served as consultant for the Garmin GPS system integration and documentation
- Obtained a Secret Security Clearance (Active through 2021)
- Earned an honorable discharge from a 4-year commitment

Computer Experience

- Scripting - bash, python, sed, awk, lisp, ruby
- Compiled - C/C#/C++/Obj-C
- Environments - Visual Studio, Xcode, Cygwin, make
- Version Control - Git, Subversion, Mercurial
- Web - HTML/CSS/Javascript, Foundation(Zurb)
- Writing - Markdown, Latex, blog.johnregner.com
- Experience in Digital Signal Processing (Audio and Image)

Education - Milwaukee School of Engineering (MSOE) ***2007–2011***

BS in Electrical Engineering - *GPA 3.31 - Dean's List 12/12 Trimesters*

Studied Digital Signal Processing and Embedded Systems

- Developed WinForms GUI to track usage, and remotely control home electrical outlets.
  - Outlet displayed real-time cost based on usage and automatically collected price. Wireless communication between outlet and pc allowed cost and usage to be displayed on both devices.
  - Established team usage of SVN for microcontroller and Windows Application source code.
- iPhone Audio Effects System
  - Wrote iPhone audio effects processor using CoreAudio. Samples from microphone were taken and processed using a user selected algorithm. Effects available were a variable time echo/reverb and distortion.
- Autonomous Robot (interrupt driven, procedural)
  - Built and programmed microcontroller robot for line tracking, collision detection, and light avoidance. This was achieved through interfacing various external hardware components with the microcontroler.
- Array Signal Processing
  - Studied the usage of multiple sources/sinks to perform noise reduction and beam forming.