MINGLIANG GE (GARY)

(614)886-3057 | ge.52@buckeyemail.osu.edu | 1026 Deacon Circle, Columbus, OH 43214 | http://garygemingliang.info

OBJECTIVE

Electrical engineering and computer science (or related) full time positions, internships or research opportunities;

EDUCATION / ACADEMIC HONORS

The Ohio State University, Columbus, OH, M.S. Electrical and Computer Engineering
Major Focus: Digital Systems / Communication
Graduation Date: December 2015
GPA: 3.18 (4.0 scale)

The Ohio State University, Columbus, OH, B.S. Electrical and Computer Engineering
Graduation Date: May 2014
GPA: 3.54 (4.0 scale)
- Dean's List (>3.5 GPA) 2.5 Years
- Recipient of International Undergraduate Scholarships
- Member of Ohio State Green Engineering Scholars Program

PROJECT EXPERIENCE

Ongoing – Unmanned Vehicle Swarm Implementation with GNU Radio and USRPs
- Design and demonstrate a robust communication architecture for an autonomous ground swarm performing specific task while an aerial swarm perform aerial verification, using USRPs;
- Majority of work on wireless communication aspect of the project, using 802.11p protocol;
- Work as a research assistant, block simulation/implementation in GNU Radio Companion;

"Microbaby" Simple Computer Architecture Design and Verification with VHDL
- Conduct verification of a simple computer architecture written in VHDL;
- Verify control unit, memory units, arithmetic/logic unit and bootstrap loader components of the architecture so that they function as expected;
- Correct design errors and generate a verification report for the architecture.

ECE Undergraduate Capstone Design - Hands-free Presentation using Microsoft Kinect;
- Developing a hands-free controlling system using Microsoft Kinect SDK and Microsoft Visual Studio to navigate between Microsoft PowerPoint slides, using gestures and motions from body tracking;
- C# language programming, 724 lines of codes;
- The final program successfully tracks human skeleton. Users are able to slide their hands either left or right to go to the next slide or the previous slide. In addition, users are able to use voice commands that control slides during presentation, such as "NEXT SLIDE" or "GO TO FIRST SLIDE".

WORK EXPERIENCE

Electrical and Computer Engineering, The Ohio State University   Columbus, OH
  Research Assistant   Sep 2014 – Present
- Block implementation using GNU Radio Companion, coding with C language;
- Currently working on creating MAC frames for different messages to the network, following 802.11p standards.

ASK Chemicals L.P.   Dublin, OH
  Intern   Jun 2014 – Aug 2014
- Assist completing a segmentation report based on US foundry industry;
- Assist gathering information regarding product usage among different foundries;
- Conduct statistical analysis and make educational assumptions on missing information using existing data.

Mathematics and Statistics Learning Center (MSLC) at The Ohio State University   Columbus, OH
  Student Tutor   Aug 2013 – Mar 2014
- Give guidance and hints with students' homework and/or problems encountered in class.

TECHNICAL SKILLS

Programming / Computing: C; C++; C#; Java; Objective C; MATLAB;
                            UNIX / Linux systems file management: Multi-threading programming, Process scheduling
Hardware Language: VHDL component design and verification; Altera Quartus II, Xilinx Design Suite;
HTML editing: Microsoft SharePoint Designer; Adobe Dreamweaver CS5.
Document Processing: Microsoft Office 2007, including Word, Excel, PowerPoint, etc.
Visualization and Sketches: Autodesk Inventor Professional 2010.
Other: GNU Radio, Statistical data analysis; Project management; Customer service;