XI HE

Portfolio: http://xismartelf.github.io/pages xh243@cornell.edu - (402) 318-1067

#### **EDUCATION**

Cornell University, Master of Engineering in Electrical & Computer Engineering, GPA: 3.38

May 2015

Course: • Artificial Intelligence • Cloud Computing • Large-scale Information System • Computer Vision

• Software System Security • Software Engineering • Computer Networks

University of Nebraska-Lincoln, B.S in Electrical Engineering, GPA: 3.87

Dec 2013

Dean's List - All semesters and High Scholar Honor student

#### **TECHNICAL SKILLS**

Specialty: • Java, C# .NET • Cross-platform Software Development • Web Application Development

# **Programming Languages & Frameworks:**

- C#/ASP.NET, VB.NET
- JavaScript, HTML5, CSS
- UNIX Shell, Linux

- Java / Android Development
- C, C++ / OpenCV
- MySQL, Microsoft SQL Server
- LabVIEW / Automation
- Python / Pygame
- Matlab / Simulink

#### **WORK EXPERIENCE**

# Cornell Dyson School of AEM, Web Application Developer, Ithaca, NY

Sep 2014 - Present

• Developed both of front end and back end of websites for New York Grape Cost Projection project from the ground up using C#, ASP.NET, JavaScript, HTML5, CSS, and Microsoft SQL Server

# General Electric, Software Engineer, Atlanta, GA

Jan 2014 – Aug 2014

Quality Group Database Windows App V1.0 (Released)

- Developed the app in C#.NET and Microsoft SQL Server, and made requested upgrades from client TestmateV1.3 Smart Meter Test Automation Software (Released)
  - Upgraded the software features, migrated the software from XP to Windows 7 with GE India team, and installed the system at several plants

ANSI Meter Customer Test Report Generator V1.1 (Released)

• Created the software using VB.NET to automatically generate detailed test report and a new library using MS Office API for future office automation software development (GE High level of Simplification Savings award)

# General Electric, Test Automation Intern, Atlanta, GA

May 2013 – Aug 2013

- Completed the design of the Smart Meter Firmware Test Automation system with GE India team using LabVIEW, ActiveX, .NET, Batch processing, KVT scripts, Metermate, and C++ DLL
- · Led the creation of Atlanta meter firmware automation testing capabilities

# UNL EE Department, Undergraduate Research Assistant, Lincoln, NE

Aug 2011 - May 2013

- Developed firmware of F2812 digital signal processor in C and Matlab Simulink
- Designed the wireless communication system between dSPACE and digital signal processors

#### **SELECTED PROJECTS**

# Cloud and Smartphone-based Home Security System (Java, C++)

Jan 2015 - Present

- Implemented the remote message alert feature using Google Cloud Messaging for Android API
- Creating object detection computer vision algorithm and real-time video streaming monitoring feature through RTSP protocol in WAN for android phones and home central control computer.

# **Smartphone-based Building Indoor Tracking** (*Java, Python*)

Aug 2014 – Dec 2014

• Developed the Client-Server architecture using TCP/IP socket programming for android phone (client) and server computer, and implemented the Wi-Fi fingerprint weight-centroid localization algorithm

# **Unbeatable Tetris Player with AI - Web Game** (JavaScript)

Sep 2014 - Dec 2014

· Implemented the Tetris feature AI algorithm and Particle Swarm Optimization method for agent Intelligence

# **Hand Gesture Tracking and Segmentation** (C++ / OpenCV)

Aug 2014 – Dec 2014

· Created the robust computer vision hand search algorithm, and created accuracy test scripts

#### Hong4Poker Game (Java / Android)

Mar 2014 – Aug 2014

• Designed and implemented the android game scheme, game algorithm, and NPC intelligence

#### **HONORS**

- Oskar Edison Student Support Fund
  Milton E. Mohr Research Scholarship
  Hyde Scholarship
- University Creativity Academic Research Experience (UCARE) funding Holling Mem. Scholarship-Engineering