ANNI WANG

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SUMMARY

I am a junior-level software developer who is enthusiastic to learn, challenge myself, and find ways to contribute to my community!

EDUCATION

BaAS in Computer Engineering | University of British Columbia

SEPTEMBER 2014 – MAY 2018

Courses taken: Data Structures and Algorithms, Operating systems, Computer Architecture, Digital System Design, Communications Systems and Networks, Computer Security, Machine Learning,

TECHNICAL SKILLS

- _Programming Languages:_
  - C, C++, C#, Java
- UML diagrams for Design
- Object Oriented Programming
- AGILE/Project Management
- CSS/HTML with Bootstrap
- Android App Design
- Linux OS
- _Technologies:_
  Visual Studio, .NET, Eclipse IDE, Sublime Text, Git, Github, Trello, Jira, gcc/gdb, Altera-Quartus, Microsoft Office.
- LaTeX Documentation

- VHDL for Digital Design
- Field-Programmable Gate Arrays (FPGA)
- Microcontrollers (Arduino, TI)
- RTOS (TI-RTOS)
- Breadboard Circuits
- Multi-meter
- Oscilloscope
- Signal Generator
- _Others:_
  WHIMIS and Lab Safety training, First-Aid, Fluent Mandarin, Video Editing

NON-TECHNICAL SKILLS

- Neat and organized
- Quick and flexible learner
- Good communication skills
- Team player

- Hardworking
- Attention to detail
- Efficient time management
- Leadership skills

MY PROJECTS

Time-based One-time Password (TOTP) Barcodes for Starbucks App | September 2016 – December 2016

- Studied the Starbucks Mobile app payment system for vulnerability to replay attacks and social engineering.
- Created solution in form of a cryptosystem that generates for clients a barcode that changes with time.
- Used an Android app and Xamarin to emulate client and Starbuck Server interactions.
- Documented findings in an academic journal and filmed a creative video that encouraged viewer engagement.

FPGA GPS Treasure Hunt | September 2015 – May 2016

- Created an interactive scavenger-adventure game with FPGA checkpoints and Android app users as mobile units, connected by Bluetooth.
- Designed hardware architecture with using VHDL, and wrote firmware for each module in C.
- Mapped user locations on Android end and created a simple and elegant UI.

UBC Snowbots (Autonomous Navigation Robot) | September 2014 – September 2016

- Developed firmware to integrate Lidar module into robot's overall design.
- Improved Lidar algorithm to detect obstacles for navigation robot and communicated changes to team.
- Conducted research and self-motivated learning about lidar object detection, learned C++, ROS, and using Linux terminals.
- Designed test cases, diagnosed equipment, and improved overall code functionality.

WORK EXPERIENCE

Embedded Systems Engineer | Pacific Intelligent Connected Systems Limited
SEPTEMBER 2016 – MAY 2017

- Designed functioning prototype of a mesh networks of diagnostic IoT ear-tags for cattle and dairy cows that interacts with a client-side server.
- Negotiated with client to determine scope, requirements, and user stories; built a collaborative relationship with clients where a demo is presented at each sprint to indicate progress
- Used AGILE with biweekly sprints and daily scrums for continuous integration and testing.
- Organized tasks and stayed focused on goals; used *Git* and *Jira* for managing progress
- Developed product that meets requirements and constraints by designing and passing test cases.

VOLUNTEER EXPERIENCE

Lumohacks, Burnaby, BC | 2017-2018

- Health Hackathon – Simon Fraser University
  - Set up equipment for guest speaker
  - Guided participants around campus
  - Assisted in demos and cleanups

ACTIVITIES

I have a passion for exploring the world.