

Yagnik V adher



840, Fairfax street, Coquitlam | 604-813-2995 | yvadher@sfu.ca | <https://yagnik.azurewebsites.net>

EDUCATION

SIMON FRASER UNIVERSITY – BURNABY, BC

May 2014-Present

4th year, Computer engineering

SKILLS

SOFTWARE

- Proficient in C/C++
- Python
- Javascript (Node js)
- AngularJS, Angular2+
- JAVA (Android/Processing)
- HTML/CSS
- SQL, NoSQL
- ARM Assembly
- BASH scripting

HARDWARE

- Custom hardware design
- VHDL with Quartus
- Proficient soldering skills.
- Understanding of modern Computer architecture
- Experienced in embedded system
- Field Programmable gate Array(FPGAs)

TECHNICAL

- Software development process(Agile, XP, FDD)
- UI/UX design
- Networking and Security
- Proficient in LINUX
- Visual studio 2015
- Eclipse for JAVA and c++
- Android studio
- Github version control

TECHNICAL WORK EXPERIENCE

CUEPATH INNOVATION , TECHSTARS (SEATTLE), VANCOUVER

Jan 2017- Aug 2017

- Worked with custom IoT hardware firmware. Used Silicon lab BGM111 Bluetooth low energy module (BLE) for the custom hardware and wrote the various firmware for the hardware in BG script and C.
- Wrote various testing scripts for monitoring a battery level and verify ADC value reading from the custom hardware inputs. Implemented a email system which sends the email to client on low battery level.
- Soldered custom test jigs and troubleshooted the problems with the electronics components.
- Made wireless system to update the firmware of custom hardware. Used Node js and custom raspberry pi hardware for Bluetooth communication.

RESEARCH ASSISTANCE ON INTERNET OF THINGS(IOT), SFU, BC

August 2016- Jan 2017

- Tested Cannye app which connects raspberry pi to cloud network which helps users to access data on cloud. Understood VNC(Virtual network computing) and utilized it.
- Wrote various IoT projects code in python to test the app and its functionality. Wrote node.js server side scripts for posting data to server.
- Gathered requirements for prototype of android app which let user access the raspberry pi and its GPIO through wifi.
- Used WIFI, Bluetooth and Ethernet connection to connect raspberry pi to internet.

PROJECTS (Self Directed)

BUDS-FINDO, (ANGULAR JS, NODE , EXPRESS, MONGO DB)

- Created an app that lets students at SFU post active topics using geolocation. This lets students either find study groups or any sort of active event based on geo location.
- Used MEAN stack to make a secure and fast performance application. Created a responsive UI that gives a pleasant user experience.
- App runs a node express server on backend and mongo DB uses mlab for storage.

MAZE SOLVER, (PYTHON)

- Designed Wall follower algorithm to solve the maze generated by the text file.
- Implemented a visual representation using PYTHON turtle functionality which takes the text file and generate the maze and tringle moves in maze according to algorithm. Used a O(n) complexity to solve the maze.

FLAPPY BIRD GAME, (C# FORMS, .NET FRAMEWORK)

- Using C# form, created a flappy bird game which has different type of game level and pause and resume functionality
- Implemented user friendly functionality with the nice visual representation and error free game

EMAIL NOTIFYEE WITH RASPBERRY PI, (LINUX / PYTHON)

- Designed LED circuitry and implemented python code using IMAP client to notify user with LED blinks whenever user get email and is unread.
- Used Linux OS (Raspbian Jessie) to make python script and used VNC network to access Raspberry pi through other computer on any network.
- Used gmail IMAP client to receive notification about email status.

BOOST SERIALIZATION, (C++)

- Created world cup classes objects which has complex inheritance and has various class functionality. To store this data in a string based archive and use it to pass it over communication link, created a serialization of objects
- Used boost serialization to serialize and deserialize the object. Tested with initializing the object, stored serialized string in text file and restored the object from text file

PROJECTS (Simon Fraser Univeristy)**TIC TOC GAME PLAYING ROBOT, (C)**

- Using Lego Mindstorms EV3, created Artificial Intelligence which plays game with users using red and white balls and wins accordingly hardness level
- Implemented Minimax Recursive Algorithm in RobotC which interacts with the users and using the sensors value and the ball dispenser play game with user.

GO-TALK, IOS APP FOR AUTISTICS CHILDREN (SOFTWARE DEVELOPMENT CMPT 275, IOS, NODE, MONGO)

- Created an ios app for autistic children to help them communicate easily with use of techconlogical devices like mobile, tablet, or any sort of lcd device.
- Worked with team of 5 people, started with gathering requirements, documented all necessary documents for software development process and developed very user friendly UI app. Followed all necesasary standards for software development.

WORK EXPERIENCE**Community Advisor, Simon Fraser university Residence life****Fall 2015-2016**

- Planned events for community of diverse student body, helped students to set in university life environment, made their transition from high school to University smoother
- Worked with team and lead events to raise awareness about killer whale
- Wrote maintenance and incident reports which helped me to strengthened written communication skill

IT services, Fraser International college**Fall 2015-2016**

- Troubleshooting of computer problems including Operating system windows and Mac
- Fixed the XEROX printers and solved networking problem occurred with printers and student account

VOLUNTEER EXPERIENCE

- | | |
|--|--|
| • Project Manager, SFU student peer tutors club
(Former president) (2016 January-Present) | • Residence Orientation Leader (2014-2016) |
| • Guidance Advisor (2016-Present) | • Bike tool co-op Workshop (2014 May) |
| • Awareness camping Team (2014-2015) | • Peer Educator (2014 -2015) |
| | • Peer advising (2015 -2016) |

AWARDS

President Honour Roll, SFU, BC
 Deans Honour Roll, SFU, BC
 Most Engaging student (FIC Awareness Team)

Summer 2016
Fall 2017
Fall 2015