Muhammad Hamza Khan

COMPUTER ENGINEERING STUDENT

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EDUCATION

Illinois Institute of Technology
May-2019
Bachelors in Computer Engineering
- Leadership Academy Full Tuition Scholarship
- IIT Student Scholar
- Deans List 2015

LEADERSHIP

International Students Organization
Vice President   *2016 - Current*
- Restarted the organization and drafted its constitutional framework along with team members.
- Conducted 4 conferences to develop structural plans.
- Participated in devolment organization's official website and cooperative emailing.

LANGUAGES

Proficient: Python and Java
Experience in: JavaScript, HTML, CSS and C

SKILLS

Software & Tools: LabView, OrCAD PSpice, Easy68K, QTspim, Arduino, Raspberry Pi, HCO5 Bluetooth Module, ESP8266 Wi-fi modules.

Experience in: Git & UNIX command line.

COURSEWORK

Object Oriented Programming, Data Structures and Algorithms, Discrete Structures, Systems Programming, Digital Systems, Engineering Electronics, Databse Organization, Introduction to Machine Learning.

SELECT PROJECTS

Music Exchange - Stock Market For Songs   *2017-Current*
- Implementing an interactive stock market for music using live opensource API and database.
- Generated Algorithms & formulae to deduce price changes.
- Using Graph & Data Management APIs
- Simulates stock value fluctuation for historical data using a popularity index calculated using changes in demand and supply for songs.

Formula SAE Electric Car   *2017-Current*
- A team of 26 engineers are building a fully-electric car for an international race competittion in May 2017.
- Assigned role of Software Programming Lead in the team.
- Programmed an Adruino C library for the car.
- Developing and implementing a CAN BUS communication network, allowing signal transfer within multiple Electronic Control Units.

Home Automation   *2016-Current*
- Built a home automation system, using ESP-8266 Wifi modules as nodes to develop a star topology network which communicates with a server (Raspberry Pi).
- Programming a user interface with react js framework to develop iOS, Android and Web applications.
- AI features to be implemented in the future.

Electric Field Measurement Application   *2016 Fall*
- Developed a program using Java which plots a cartesian plane of an electric field.
- Calculates the electric field strength, resultant electric force and direction between randomly placed charges in an electric field.

WORK EXPERIENCE

Resident Advisor   *2016 - Current*
- Built an inclusive community of 40 residents in campus housing.
- Planned, advertised and conducted 21 programs which fostered social and mental growth of residents.

Community Desk Assistant   *2016 - Current*
- Provided customer service and managed a monitoring software at front desk for residence hall of 1200 residents.