



sappiah@uwaterloo.ca

Shruti Appiah

2A Systems Design Engineering

Work Experience

Project Engineer Evertz Microsystems

- ⊕ Javascript
- ⊕ SQL
- ⊕ Spring Configuration
- ⊕ Web Services/HTTP
- ⊕ SOAP
- ⊕ XML
- ⊕ Relational Databases
- ⊕ FTP/FXP
- ⊕ Video Processing
- ⊕ puTTY | Bash | Vim
- ⊕ Cloud Platforms

- Built and automated the complete workflow processes for a leading On-Demand **Internet streaming media** provider (Brightcove VideoCloud)
- Used **web services** to interact with different servers and platforms.
- **Spring configured** UI elements and reports in applications.
- Worked with **Oracle SQL Developer** to query extensive databases and generate reports for client use.
- **Managed server systems** using puTTY, Bash and Vim.
- Integrated applications with **business systems** using XML as an interchange format.
- **Presented final product to clients**, explained and walked through all features and functionality with an **interactive demo**.

UX/UI Developer Infosys

- ⊕ Javascript
- ⊕ HTML5 | CSS
- ⊕ Visual Studio
- ⊕ jQuery
- ⊕ D3
- ⊕ JSON
- ⊕ Balsamiq Mockups

- Built a **data visualization dashboard** from scratch for the Infosys IT Service Management Platform using **client-side technologies** such as Javascript, HTML5 and CSS.
- Implemented a **fully interactive UI** which was optimized to represent larger, complex data within smaller spaces, thus improving user experience.
- Made **user-customizable charts** using the Javascript libraries: jQuery, D3, Google Charts and raphael.js.
- Made fortnightly **performance indicators** and presented project content and deliverables in the midterm and final **presentation**.

Skills

TECHNICAL

- **Programming:** C++ , Object Oriented Programming, Javascript, SQL, Python, HTML5, CSS, Visual Basic, Q-Basic
- **Design software:** Multisim Circuit Design, SolidWorks, Adobe Photoshop
- 20+ months of experience working in a lab environment - Electrical, Electronics and Hardware, Optics, Mechanical and Chemical
- **Operating Systems:** Windows, Linux, iOS, Android
- **Engineering Design:** Advanced design methodologies, HTA & FTA, Neilson's Usability Heuristics, Decision Matrix, Control & Display principles, SWOT analysis
- Experienced in **configuring hardware, large routers, transcoders and servers**.

PROFESSIONAL

- Excellent **presentation skills** and smoothly interacts with clients
- Efficiently keeps track of **project progress** and **task performance** using **project management** technologies such as Trello.
- Strong **interpersonal, verbal and written communication skills** developed through extensive participation in public speaking clubs.

PROJECTS

- **Patient health monitoring device** A portable device that tracks, keeps record of patients' health and generate alerts accordingly to manage large numbers of patients in a health-care centre. Built using an Arduino UNO, sensors and audio components.
- **Graphing calculator redesign** Re-designed a calculator using Neilson's Usability Principles.
- **Microcontroller memory game** Programmed and assembled a music memory game using an MSP430 and the Energia IDE.
- **Design Project on Urban Agriculture** Designed and prototyped a quick, efficient and environmentally friendly weed removal system that requires minimal physical labour.

Design team: Waterloo Aerial Robotics Group [Fall 2013]

Built a **GPS tracker and receiver** and integrated it with the ground and aerial control system of the airplane.

ACHIEVEMENTS AND VOLUNTEERING EXPERIENCE

- Distinction in Euclid Mathematics Contest (top 25% worldwide); 3rd place in High School.
- Participant in Kik Hackathon.
- Participant in Google Engineering Hackathon.
- President's Scholarship of Distinction, University of Waterloo.
- High School Honour Roll Student
- First Aid and CPR, American Heart Association.
- 12th place in Standard Chartered Marathon (females aged 12-20), Dubai.
- Won Young Entrepreneur's Competition.
- Member of Green Patrol Environmental Association.

Education

UNIVERSITY

University of Waterloo

Candidate for Bachelor of Applied Science,
Honours Systems Design Engineering,
Cooperative Program

[September 2013-present]

HIGH SCHOOL

The Indian High School, Dubai.

- Graduated with a 94% overall average,
Honour Roll Student.

Relevant Courses

- ⊕ Data Structures & Algorithms
- ⊕ Digital Systems Lab
- ⊕ Management Sciences:
Organizational Behaviour
- ⊕ Electromagnetics & Optics
- ⊕ Human Factors in Engineering
(Ergonomics)
- ⊕ Digital Computation
- ⊕ Introduction to Design
- ⊕ Graphics Lab
- ⊕ Dynamics & Statics