

EDUCATION

Bachelors of Electrical Engineering Ryerson University

09/2014 – 04/2019

Toronto, ON

Deep Learning Nanodegree Udacity

04/2018 – 09/2018

WORK EXPERIENCE

Engineering Design Associate Intern Celestica Inc.

04/2017 – 08/2018

Achievements/Tasks

- Performed Schematic Modeling Analysis (validation) and Hardware Review utilizing eCAD tools such as Cadence's Concept HDL, Allegro, Mentor Hyperlynx and SI-wave;
- Successfully completed 4 projects as a project leader;
- Created component models, thoroughly reviewing vendor datasheets, interpreting and extracting data;
- Produced, reviewed, and submitted 60 professional project reports to customers in a timely manner, liaising between customers and analysis team using Agile methodologies;
- Created detailed Statement of Work (SOW) documents based on customer-supplied design information;
- Performed Reliability Analysis and Component Derating review for all passive and active design components

Technology Associate TechZenik Robotics and Information Sys.

07/2018 – 08/2018

Achievements/Tasks

- Provided workshops on Game Building with Unity, 2D animation with Adobe Animate, 3D animation with Blender, supported with Arduino and Raspberry Pi workshops

LEADERSHIP EXPERIENCE

Chair, IEEE Ryerson University Student Branch (04/2018 – 04/2019)

Coordinated a team of 24 motivated individuals to plan and execute an array of events (academic, social, networking) for Ryerson Engineering students

Chair, IEEE Ryerson Electronics Chapter (04/2016 – 04/2017)

Developed and delivered weekly workshops on practical considerations in electronics, circuit applications, and micro-controllers

Evergreen Brickworks (04/2013 – Present)

Community Bike Hub Ambassador, Advisory Committee member

SKILLS

eCAD

MATLAB

Jupyter Notebook

Github

VHDL

Python

Java

C/C++

MS Office Suite

Assembly

SystemC

UVM

Cadence Virtuoso

ENGINEERING PROJECTS

ARM Cortex M3 Media Centre - C Programming

- Used MCB1700 board and uVision utilizing concepts such as RTX Real-Time scheduling, Multithreading and Conditional Executions to program a multi-purpose Media Centre in C

Banking Application Software System - Java

- Analyzed, designed and implemented a banking application using Java and JavaFX GUI software system in Eclipse IDE. Designed utilizing UML diagrams using a combination of several engineering design patterns and tested with Black box and White box testing

Deep Learning CNN and DCGAN Model - Python

- Created a Dog-Breed classifier using Convolutional Neural Networks. Also created a program to Generate Faces using DCGAN model using Python in Jupyter Notebooks

CMOS 2-stage Amplifier and 1-bit Full Adder - Cadence

- Designed a 2-stage CMOS amplifier with compensation, appropriately sizing and characterizing all transistors using CMOS Analog IC Design. Used Digital CMOS to design and implement a 1-bit Full Adder, including creating schematic, Layout Verification, and Post Layout Simulations

Linear Regression Modeling and Black-Box Unknown System Identification

- Used MATLAB and knowledge of Linear Regression Modeling of Modern Systems Identification to perform a successful parametric model identification and established a model to validate the results

ACHIEVEMENTS

Winner, Jet Brain's sponsored MLH Hack Harassment category, RU Hacks

Winner, 2nd Place, Major League Hacking (MLH) at UoFT, www.devpost.com/SadeedBari 🔗

RELEVANT COURSES

SoC Design

Object-Oriented Analysis/Design

Algorithms & Data Structures

Digital Systems

Embedded Systems Design

Control Systems

Low Power IC Systems

CMOS Analog IC