Archit Rathi

Masters of Engineering Electrical and Computer Engineering

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EDUCATION

***M.Eng. Electrical and Computer Engineering*, University of Ottawa** Jun 2020

GPA: 7.5
Courses: FPGA Designing | Ethics in AI | Machine Learning Feature Extraction | Software & Product Management

***Bachelor of Technology Electronics and Communications Engineering*, G. B. Pant Engineering College, India** Jun 2017

GPA: 77%
Courses: VLSI & VHDL Design | MRI De-Noising | Image Processing | Microelectronics

SKILLS

Programming Langugages C#/C++ | Kotlin
Hardware Description Language Verilog | VHDL
Platforms Xilinx Vivado | MATLAB | AVR Studio | Unity | Visual Studio | CADENCE | ALTIUM Designer | Adobe Photoshop

EXPERIENCE

***Assistant Executive*, iEnergizer Ltd., Noida, India** Dec 2017 → Jul 2018 (8 months)

Focusing on finding solutions for Telecom based grievances for customers for Sprint U.S. Telecom & converting leads/intelligence into sales and signing more customers for our client.

***Summer Intern*, Su-Kam Power Systems Ltd.** Jun 2016 → Aug 2016 (3 months)

Manufacturing & PCB testing of solar inverter circuits for 12/ 24 Volt solar panels.

PROJECTS

Android Game Development Apr 2020 → now (2 months)

Gaming | C# | Unity Engine | Visual Studio | Adobe Photoshop | Scripting

Android Game designing using Unity gaming engine creating different sprites and objects. Space exploration game. Adding C# scripting using Visual Studio for functionalities. Object creation and sprite animation using Adobe Photoshop.

FPGA Verilog Memory Designing Jan 2020 → Apr 2020 (4 months)

Verilog | Vivado | Cache Designing | Power system analysis | design optimization | Xilinx

Designed Cache Memory as well as its testbench using Verilog on Xilinx Vivado using Direct Mapping. Power system analysis, clock gating, and pipelining performed for design optimization.

Research Assistant Jan 2019 → Dec 2019 (1 year)

UWB Radar | Data Analysis | Pattern Recognition | Data Classification

Trained system to detect irregular respiration which leads to stroke or heart failure using UWB radar. Performed exploratory data analysis, pattern recognition, and data pipe-lining on time series data to find trends and patterns in respiration variations with the objective to extract relevant features for classification

Final Year Project

Jul 2017 → Jun 2018 (11 months)

MATLAB | MRI | Image Processing | Fuzzy Design Logic | Simulink

MATLAB based MRI Image De-Noising filter using Fuzzy Logic Design. Combined Fuzzy Logic with MRI de-noising techniques to better detect brain tumors using MATLAB and Simulink performing better than other methods available for detection.

CERTIFICATIONS

Aerial Robotics, University of Pennsylvania

Apr 2017

Online course focusing on the mechanics of flight, the design of quadrotor flying robots, and developing dynamic models and synthesizing planners for operating in 3-D environments using programming in MATLAB

Advanced Robotics, i3Indya Technologies Ltd., India

Jan 2015

Winter training in Embedded System and Robotics focusing on Atmega 16 board projects and its applications. Programming in Embedded C language using AVR Studio 4 and simulations done on Proteus.

Cadence SoC Design in VLSI, Technical Society of Electronics and Communications Engineering

Sep 2015

Schematic designing and layout of PCB components and performing DRC/LVS checking for design optimization.