

ONEAL M. ABDULRAHIM

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OBJECTIVE

Seeking full-time relevant roles in the Computer Engineering industry, namely controls, firmware development, and tech solutions.

EDUCATION

Texas A&M University, Dwight Look College of Engineering

College Station, Texas

Bachelor of Science in Computer Engineering - Computer Science track (CECN) GPR: 3.35

December 2019

EXPERIENCE

Electronic Controls Engineering Intern

May 2018 - August 2018

Goodman Manufacturing, Daikin Group

Houston, Texas

- Systematizing feedback from electronic sensors to design a self-regulating, dynamic algorithm for bypass-less zoning HVAC systems
- Programming, debugging, and adapting preexisting indoor HVAC firmware & libraries; electronics leverage PIC microcontrollers
- Constructing physical testing mechanisms, test-benches for simulation, as well as software testing & analysis of measured lab data

Advanced Repair Agent (ARA)

November 2012 - Present

Geek Squad, Best Buy

Houston, Texas

- Administrating ~100+ client device (phones, tablets, laptops, desktops) repairs weekly, minimizing turn time and maximizing NPS
- Usage of dozens of industry tools, applications, and operating systems (antivirus, Windows 7, 8, 10, MacOS/OSX, Android, iOS)
- Translating technical fixes to understandable terms while providing demonstrations of cutting-edge consumer-grade products

LEADERSHIP & ACTIVITIES

IEEE TAMU President (Branch Chair)

May 2018 - Present

- Overseeing 24 Electrical & Computer Engineering student leaders in 7 major branches across 1000+ TAMU student members.
- Leveraging leadership qualities alongside relevant experience to promote an always-growing, positive, and rewarding environment.
- Designing & planning 100+ frequent events alongside student leaders: career fairs, workshops, socials, hackathon, and meetings.
- Budgeting organization cash flow while ensuring proper maintenance of event costs, refunds and reimbursements, and donations.
- Interfacing professionally with engineering departments, faculty and staff, and official university affairs for organization upkeep.

IEEE TAMU TEC Senior Officer

August 2016 - May 2018

- Leading the branch's Technical Education Committee to create and host over 20 annual programming, microcontroller, and 3D printing workshops and lectures targeting EE and CE majors, industry-related topics in preparation for professional settings.

TAMU-Qatar Student Leadership Exchange

Spring 2018

- Exercising supporting qualities as a chosen participant in a week-long discussion session, seminar, and workshop-oriented program.

Robotics Student Research

Summer 2017

- Implementing of control, feedback, and dynamic linearization using Raspberry Pi and iRobot Create 2 programmable robot system.

COURSEWORK

Computer Engineering

- *Analysis of Algorithms*: analyzing greedy algorithms, dynamic programming, amortized analysis, graphs, MST, shortest-paths, P/NP
- *Computer Systems*: programming POSIX over UNIX directly at the OS interface level in C/C++, design of memory, PC, IPC, TC/IP
- *Programming Languages*: exploring design space and idiomatic uses of functional and object-oriented languages (Haskell & Java)
- *Data Structures*: implementing theory of arrays, vectors, linked lists, queues, stacks, trees, skip lists, hashes, and graphs
- *Test Driven Development*: creating and using rigid code tests, exercising agile methodology and Git using Python

Electrical Engineering

- *Computer Architecture*: studying of computer datapath, memory, control unit, ALU through the MIPS assembly language
- *Digital Integrated Circuit Design (VLSI)*: calculating & optimizing transistor-level schematics, metal layouts, and CMOS design
- *Signals & Systems*: evaluating signal convolution, analysis of Fourier & Laplace transforms for systems in time and frequency domains
- *Digital Systems Design*: constructing electric circuits and gate-level diagrams, (low/high-pass filters, rectifiers, adders, flip-flops, ALUs)
- *Electric Circuit Theory*: simulating circuit behavior and design with Multisim, PSpice, Verilog and VHDL (Vivado)

HONORS & AWARDS

Texas Aggie Achievement Grant

May 2017 - Present

College of Engineering Merit-Based Grant

August 2016 - Present

TECHNICAL SKILLS

- *Programming Languages*: C++, Java, Python, C, JavaScript
- *Markup & Web*: HTML5, CSS
- *Simulation*: Multisim, Verilog & VHDL (Vivado)
- *Microcontrollers*: Arduino, RPi, Freescale, Launchpad
- *Engineering*: Gantt/WBS Planning, binary exclusion, FDIR
- *Software*: MATLAB, LABView, Microsoft Office 2016, 365 (Word, Excel, PowerPoint, OneNote, Outlook, Visio)
- *Foreign Language*: Fluent in spoken Farsi/Persian (Ajam dialect)