ONEAL M. ABDULRAHIM

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OBJECTIVE

Seeking full-time relevant roles in the Computer Engineering industry, namely controls, hardware/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: 3.32* *December 2019*

EXPERIENCE

Electronic Controls Engineering Intern/Co-Op *May 2018 – December 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
- Designing of PCB (relay control) with CAD, 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*: Eagle, Multisim, Verilog & VHDL (Vivado)
- *Microcontrollers*: Arduino, Microchip PICs, RPi
- *Engineering*: Gantt/WBS Planning, binary exclusion, FDIR
- *Software*: MPLabX, MATLAB, LABView, Microsoft Office 2016, 365 (Word, Excel, PowerPoint, OneNote, Outlook, Visio)
- *Foreign Language*: Fluent in spoken Farsi/Persian (Ajam dialect)