# Michael Koger Darden

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#### **EDUCATION**

# Bachelor of Science, Electrical and Computer, May 2018

The University of Texas at Austin **GPA**: **3.76/4.00** 

# Related Courses

Embedded Systems, Software Design and Implementation (I & II), Circuit Theory, Linear Systems & Signals, Algorithms, Probability, Electromagnetic Engineering, Real-Time Digital Signal Processing

#### **WORK EXPERIENCE**

# **Student Technician, UT Applied Research Laboratories**

06/16 - 08/16

- Setup GitLab Continuous Integration (CI)
- Wrote scripts in Bash to facilitate CI testing

#### **ACADEMIC EXPERIENCE**

## Real-Time DSP Lab, The University of Texas at Austin

01/17 - 05/17

- Designed and implemented digital FIR and IIR filters
- Simulated software-defined radio and Implemented PAM transceivers
- Worked with signal generators, oscilloscopes, MATLAB, and TI Code Composer Studio

#### Software Design project, The University of Texas at Austin

06/16 - 08/16

- Created a graphical critter simulator using Java
- Learned how to use java Reflection and JavaFX libraries as well as Scene Builder

## **Embedded Systems Project, The University of Texas at Austin**

04/15 - 05/15

- Created a "tag" video game on the TM4C123 microcontroller using C and ARM assembly language
- · Placed in "supreme" category

#### Robotathon 2015, UT Robotics and Automation Society

10/15 - 11/15

- Created a robot car to play RAS-ball
- Programmed in VIM

#### Robot Car Project, The University of Texas at Austin

10/14 - 12/14

- Programmed in Labview and built breadboard circuits
- Interfaced photoresistors and IR sensors

#### **PERSONAL PROJECTS**

#### Personal Server

08/16

- Setup a Proxmox server to host chat, game, and web servers
- Setup Linux containers, VMs, and SSH with RSA encryption

## 3D design

Designed an infinity-standing-desk using SOLIDWORKS and Git

07/16

• Designed and 3D printed a formicarium using SOLIDWORKS and MakerBot

04/16

# **Arduino Projects**

<ul> <li>Created an internet controllable desk-light using Javascript and PHP</li> </ul>	09/16
<ul> <li>Created a Bike-Wheel Display using Image Processing</li> </ul>	02/16
• Created a 5V DC power supply	12/15

## HackTX 2015, The University of Texas at Austin

09/15

- Created a static website using HTML/CSS
- Worked with GitHub

#### **SKILLS**

Experience with Git, Java, C, C++, Bash scripting, MATLAB, Assembly language, Labview, and TI Code Composer Studio

Proficient in Windows, OS X, and Linux

Experience with soldering and breadboard-circuits

Experience with Arduino, Launchpad microprocessors, and TI TMS320C6700 Digital Signal Processors

Experience with HTML/CSS web-design using Bootstrap, Javascript, and PHP

Experience with GIMP and Photoshop

Experience with SOLIDWORKS 3D design

Familiar with Spanish and Portuguese

Familiar with Mandarin Chinese

## **ACCOMPLISHMENTS**

Administrative Vice President for Texas Tricking, Fall 2016 - present

UT Social Dance Class Assistant, Fall 2016 - present

Volunteer: English teacher in Peru, 2014

Volunteer: Veterinary assistant at Cape Town SPCA, 2013

Drumline Lieutenant, Outstanding Leadership Award, 2012-2013

Eagle Scout, 2009