# ANDER M. U. MORAN

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andermorantx@gmail.com	
EDUCATION	
Texas A&M University, College Station TX	Expected May 2019
Bachelor of Science, Mathematics and Computer Science	1
• GPA: 3.67/4.00	
The John Cooper School, The Woodlands TX	May 2015
• GPA: 3.50/4.00	•
• Overall SAT Score: 2190/2400	
• SAT Subject Test: Mathematics 2 – 800/800	
ACTIVITIES	
Varsity Tennis Captain	Spring 2014, 2015
• Lead team practices	1 8 1 3
Organized team in tournaments	
TAMU cybersecurity club	Fall 2016
Learned about webpage security	
WORK EXPERIENCE	
Tutor, The Woodlands TX and College Station TX	Fall 2011 – Present
• Physics	
Computer Science	
British Literature	
• SAT Writing and Math	
Intern at Providence Hospital Of North Houston Llc, Houston TX	Summer 2016
• Set up the network of computers and operating systems	
Assisted employees with computers and technical issues	
Intern at i.e.Smart Systems, Houston TX	Summer 2016
Configured audio/visual equipment and developed software for such systems	
AWARDS/HONORS National Hispanic Scholar  • Awarded by the College Board to academically exceptional high-school Hispanic/Latino studies National Society of Collegiate Scholars, Member  • Recognizes outstanding achievement among first and second year college students Phi Eta Sigma, Member  • National honor society for first-year college students Sigma Alpha Lambda, Member  • National Leadership and Honors Society Sigma Alpha Pi, Member	Spring 2015 dents Fall 2015 – Present Spring 2016 – Present Spring 2017 - Present Spring 2017 - Present
National Society of Leadership and Success	1 0
SKILLS Programming Languages  • Basic HTML, Java, C++, Python, Shell, AppleScript, PowerShell, Swift, Haskell, Objective-C Brainf***  • Data structures and algorithm analysis Computer Knowledge	C, C, Assembly basics,
<ul> <li>Adobe Photoshop, Adobe Illustrator, Adobe After Effects, Adobe Muse</li> <li>Understanding of OS X and Windows</li> <li>Replacing RAM and hard drives</li> <li>iOS Reverse Engineering</li> <li>Understand the reverse engineering progress regarding iOS applications</li> <li>Reverse engineered dozens of iOS applications</li> </ul>	Spring 2016 – Present
Reverse engineered iOS SpringBoard  Micro controllers	Spring 2016 Present
BULLONG GO-MATHOLIGAG	Spring /III6 Procent

1 of 2 Ander Moran Spring 2016 – Present

Micro controllers

- Arduino
- Raspberry Pi

# PROJECTS (andermoran.github.io)

# Mobile Phone Applications (iOS)

• Simple Media: an application for legally blind users that facilitates reading on-screen

- Piqqer: an application which is programmed to randomly select an item from a list
- Calculator: an application with an interactive calculator
- Helped developer (@cokepokes) of an iOS jailbreak tweak with 300,000 users

## Xbox Live Gamertag (private)

• Written in Python

- Scraped webpages to see if any given gamertag was available
- Ran with a list of the 10,000 most common words to see if any were available to use

# Nightmare (github.com/andermoran/Nightmare)

• An iOS "tweak" dynamically injected into Snapchat at runtime

- Created an in-depth dark mode for the app
- Had ~300 users before Snapchat buffed their security within their iOS app
  - O Learned to deal with consumers from all over the world
    - Users from South America, Europe, Asia, Middle East

## Brainf\*\*\*++ & Brainf\*\*\* Interpreter (github.com/andermoran/brainfuckinterpreter)

• Built a Brainf\*\*\*(++) interpreter for Unix based operating systems

o Debugger in process

• In the process of developing the Brainf\*\*\*++ language (based off the esoteric language Brainf\*\*\*)

## Class Checker for Texas A&M University

Spring 2017

Spring 2017

Fall 2015

Summer 2014 - Present

Fall 2016 - Spring 2017

Made for macOS using Xcode and Objective-C

- Alerts the user when there is an opening in a class that is full
- Scrapes the Texas A&M course scheduler website for information regarding classes
  - o Reverse engineered the webpage to find data source

## 8 bit load-store processor

Spring 2017

- Strengthened understanding of registers, RAM, and ALU
- Could add two two-by-two matrices and output the result in the RAM
- Created custom assembly language suited for the processor architecture

### Objective-C Code Injection in MacOS Sierra

Summer 2017

(github.com/andermoran/Objective-C-code-injection-example-in-macOS-Sierra)

- Learned how to create a dylib and inject it into a running process
- Swizzled methods with the help of Objective-C runtime

# Detective-C, Library for Objective-C runtime inspection

Fall 2017

- Dumps information (properties, instance variables, methods) about any given class when only provided with a class header file or an executable referencing said class
- Useful when injecting a dynamic library into a process and need more information

### **CURRENT INTERESTS**

### Cybersecurity

- Low level operating system security
- Fuzzing
- Binary exploitation

# **Operating Systems**

- Drivers
- Kernel

### **User Software Development**

• I am more comfortable writing command line programs and want to expand my knowledge on creating GUI based software