

# CONNOR TAFFE

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## EXPERIENCE

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### **Summer Undergraduate Program of Entrepreneurship and Research (SUPER),**

**UALR**

*SUPER Scholar*

Summer 2015

*Little Rock, AR*

- Creation of an Android App, written in Scala, to interface with a vehicle's OBD-II system via Bluetooth transmitter.

### **Emerging Analytics Center (EAC), UALR**

*Software Engineering Intern*

October 2014 - May 2015

*Little Rock, AR*

- Presented at IEEE VR 2015 on the integration of Unity 3D, Qualcomm's Vuforia, and Intel's OpenCV to create interactive Augmented Reality (AR) applications ([presentation](#)).
- Used Unity 3D (scripting with C#) for 3D programming and model manipulation.

### **BioInformatics**

*Research Assistant*

August - October 2014

*Little Rock, AR*

- Preliminary work on refactoring a genetic algorithm codebase with an emphasis on common stylistic guidelines and concurrency.

### **CentOS Server Wordpress Installation**

*Freelance Developer*

August 2014

- Installed Wordpress on a pre-imaged CentOS server.
- Set up a mysql database and edited Wordpress configs.

### **[Mesher](#)**

*Freelance Developer*

July - August 2014

- Client side stl-editing application built atop THREE.js, a popular WebGL interface.
- Provides a clean interface to many of the common operations done on STL models before 3D printing.
- This application provides a interactable 3D interface for models generated from STL files.
- Provides multiple modification and save options.

### **Future Tek Inc.**

*Contract Graphic Designer*

June - August 2012

*Columbus, MS*

- Worked as a contract graphic designer to produce a new catalog, logo, and social media presence. All graphics were designed personally with Inkscape and Gimp.
- This catalog is still in use ([link](#)).

## EDUCATION

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### University of Arkansas, Little Rock

June 2018

*B.S. in Computer Science*

- Substantial Completed Courses: Data Structures and Algorithms, Computer Systems and Assembly Language, Calculus II, Operating Systems, Databases, and Discrete Math.

### Cabot High School

2014

### Arkansas School for Mathematics, Sciences, and the Arts

2013 - 2014

- First place Intel International Science and Engineering Fair project in Materials Engineering at the local level on my research into 3D printing large angles.

### Mississippi School for Mathematics and Sciences

2012 - 2013

## PERSONAL PROJECTS

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### [Lispy](#)

September - November 2014

- Lisp-like interpreter written in Python
- Producer-consumer threading optimizes stages
- Lazy-evaluation of defined variables
- lambda functions and recursive lambdas
- EBNF formal definition of the language

### [utf8](#) / [utf8plus](#)

February 2015 - Present

- utf8 parser written in C, and C++ wrapper.
- RFC 3629 compliant.
- Quick encoding/decoding of runes, rune validation, and string parsing.
- Reports errors within the rune and codepoint (`int32_t`) types using appropriate non-valid values in C.
- Use of the `utf8::rune::exception` class to report errors in C++, or appropriate C++ standard exception.

### [bf](#)

November 2014

- Optimizing BrainFuck just-in-time compiler
- Emits x86\_64 instructions to executable mmap'd pages
- Producer-Consumer concurrent architecture with a REPL interface

## TECHNICAL STRENGTHS

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### General Programming

Languages: C#, C++, C, Go, Java, Scala, Python  
Libraries: Android SDK  
Version Control Systems: git  
Build Systems: Make, CMake, Gradle

### Operating Systems

Android: Familiarity with Android, the Android build toolchain, debugging, etc.  
BSDs: OpenBSD, FreeBSD, Dragonfly BSD, OS X  
Linux: CentOS, Debian, Ubuntu, Fedora, Red Hat Linux

### Unix/Linux Systems

Longtime Linux user. Experienced with system utilities, system administration, userspace programming, and light kernel programming.

### Web Programming

Server side: Python, Go, Php, SQL (MySQL, PostgreSQL)  
Client side: JavaScript (jQuery, THREE.js, etc.), CSS, (X)HTML