

CONNOR TAFFE

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EXPERIENCE

EIT SUPER, UALR

SUPER Scholar

Summer 2015

Little Rock, AR

- Summer Undergraduate Program of Entrepreneurship and Research (SUPER).
- Creation of an [Android application](#), 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

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

[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

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