CONNOR TAFFE

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EXPERIENCE

Emerging Analytics Center, UALR October 2014 - Present
Software Engineering Intern *Little Rock, AR*

- Worked under Dr. Carolina Cruz-Neira, the inventor of the CAVE system.
- Developed Data Visualization solutions for Oculus Rift, CAVE system.
- Used Unity 3D (scripting with C#) for 3D programming and model manipulation.

BioInformatics August - October 2014
Research Assistant *Little Rock, AR*

- Refactored Genetic algorithm code with an emphasis on common stylistic guidelines, and concurrency.

CentOS Server Wordpress Installation August 2014
Freelance Developer

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

Mesher July - August 2014
Freelance Developer

- 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. June - August 2012
Contract Graphic Designer *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

- 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.
- Courses: Computer Programming II

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 approprate 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 - Present

- 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, Java, Go, Python, Ruby, C#, Rust
Version Control Systems:	git
Networking:	C, Java, Go, Python
Libraries/Projects:	Unity3D, GTK+

Operating Systems

BSD:	OpenBSD, FreeBSD, Dragonfly BSD, OS X
Linux:	Debian, Red Hat Linux, CentOS, Fedora, Ubuntu, Manjaro
Windows:	2000, XP, 7, 8

Unix System Administration

Proficient in shell:	bash, sh, zsh, ksh, tcsh
Proficient with utils:	grep, sed, ssh, vim, nano, crontab, tcpdump, tar etc.
Experience with:	configuration files, package managers, compilation
Familiar with *nix concepts:	users, permissions, processes, cron jobs, files and i/o redirection, daemons, etc.

Web Programming

Server side:	Python, Go, Java, Php, and SQL (MySQL)
Client side:	JavaScript (JQuery, THREE.js, etc.), CSS, (X)HTML
Servers:	Apache, nginx, lighttpd