

Connor Taffe

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EXPERIENCE

Apptegy

Software Engineer

January 2017

Little Rock, Arkansas

- Spearheaded transition from monolithic Rails application to individually scalable Ruby ([Roda](#)+[Sequel](#)) containerized ([Docker](#)) microservices
- Developed multi-service multi-tenant authentication and authorization system with arbitrarily granular permissions
- Introduced [memcached](#) caching layer through [Sequel](#) which led to a 4x speedup on cached queries
- Sped up core product by two orders of magnitude through microservice rearchitecture
- Introduced and implemented industry-standard [OpenAPI](#) (Swagger 2.0) specifications for [Thrillshare](#) services
- Implemented CI and CD for core services with an internal [Jenkins](#) (with [Blue Ocean](#)) build server with Github integration
- Developed internal services including a HKP GPG key server (initially deployed for [storing encrypted secrets in version control](#)), [OpenAPI documentation server](#)

Acxiom

Entry Software Engineer

September - December 2016

Conway, Arkansas

- Big data processing with Apache Hadoop and Spark
- Explored optimization techniques using Apache Spark

All Electic Supply

Programmer

June - September 2016

Little Rock, Arkansas

- Heavy usage of PostgreSQL SQL, `psql`
- Use of Docker for testing based on production database backup
- Wrote helper programs in Go to send emails and perform regular queries
- Submitted accepted PRs to xTuple (ERP software)

Ensono (formerly Acxiom ITO)

Entry Applications Developer

October 2015 - May 2016

Conway, Arkansas

- Wrote and maintained software in C# for the .NET platform.
- Developed applications in Node.js, Golang, and Python for AWS Lambda.
- Versioned software in Git and maintained repositories in Bitbucket.
- Participated in Agile training and worked as part of a scrum team.

UALR EIT IT

Student Worker

August - October 2015

Little Rock, Arkansas

- Resolved technology related issues for staff and students.
- Tracked issues in ticketing system.
- Installed and Setup Microsoft Windows, including joining to Active Directory domain.

EIT SUPER, UALR

SUPER Scholar

May - August 2015

Little Rock, Arkansas

- 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, Arkansas

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

EDUCATION

University of Arkansas, Little Rock

Pursued a B.S. in Computer Science

- Vice President of the UALR instance of the Association of Computing Machinery; Fall 2016
- Substantial completed courses: Calculus I, II; Discrete Math; Linear Algebra. Data Structures and Algorithms, Computer Systems and Assembly Language, Operating Systems, Databases, Computer Organization, Monte Carlo Simulation, Independent study on Compiler Design, Artificial Intelligence, Language Structures, Computer Security.

Arkansas School for Mathematics, Sciences, and the Arts

Attended

- Substantial completed courses: Programming II, Physics I.

PERSONAL PROJECTS

[birch](#)

August 2016

- IRC Bot in C
- Lexing/parsing of messages using state machine

[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

- 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: Ruby, Go, C, C++, Python, JavaScript, Typescript, (X)HTML, CSS,
Scala, Java, C#, Rust, Php
Libraries: Roda, Sequel, Rails, Vue.js, Android SDK, Bootstrap
Systems: Hadoop, Spark
Tools: Docker, Git, Make, Ninja, CMake, Gradle
Databases: PostgreSQL
OS: Linux, Windows