BARRETT D. OTTE

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SKILLS

Main: C#, Java, Python, ColdFusion, C/C++, JavaScript, HTML/CSS, TypeScript, Node, Ruby, PowerShell

Exposure: Batch Script, Shell, Lua, Groovy, XSLT, Assembly x86, VHDL, RPGLE, CL, DDS

Database: T-SQL, DB2, MongoDB, PostgreSQL, Redis

Framework: Angular, .NET core, Entity, Spring Boot, JBoss, Express

Tools: Git, SVN, Gradle, Ant, Maven, Docker, GitLab CI/CD, Jenkins CI, Jira, Confluence, Nexus, Vim, LaTeX

PROJECTS

Terrain Generation Self Study - Using perlin noise to generate terrain. **[C#, Unity Engine]**

- Located at https://github.com/barrettotte/Terrain-Generation-Study
- Terrain chunk and procedural octahedral sphere generation using threading and delegates.
- LOD enabled terrain chunk scrolling using circular buffer data structure and queue.

SQL Unit POC - A POC MSSQL unit testing framework with Python and T-SQL **[Python, T-SQL]**

- Located at https://github.com/barrettotte/SQL-UNIT-POC
- Directory/file driven unit tests using T-SQL and JSON to compare expected vs actual
- Leverages transactions and dynamic SQL to safely run SQL tests

Genshi BASIC - Interpreter for my first programming language **[Python, BASIC]**

- Located at https://github.com/barrettotte/GenshiBASIC-Interpreter
- Lexer, parser, and interpreter for Genshi BASIC (an odd dialect of BASIC)
- Fundamentals of programming language design, recursive descent parsing, and AST's.

Subarashii-CPU - Homebrew 8-bit RISC CPU implmented in VHDL and breadboards **[VHDL, Assembly]**

Population Genetics Simulation - Simulate mocked DNA in organisms across n generations. **[Python]**

Assembly(x86) HTTP Server - Use system calls and sockets to serve a web page. **[NASM Assembly]**

Anilist Ruby - API Wrapper over Anilist's GraphQL API using metaprogramming **[Ruby, GraphQL]**

EDUCATION

University of Maryland Global Campus 2018: **Computer Science B.S. Cyber Security Minor**
Data Structures and Algorithms, Network Security, Software Engineering, Ethical Hacking, Concurrent Programming, Algorithm Analysis/Design, Computer Architecture, Database Admin.

Towson University 2015-2016:
Calculus-based Statistics, Linear Algebra, Graph Theory, Abstract Algebra, and general coursework

Harford Community College Graduate 2015: **Computer Science A.S.**
Vector and Integral Calculus, Networking, Assembly(x86), Discrete Mathematics, C/C++, Java

North Harford High School Graduate 2014: **Computer Science/Computer Information Systems Track**
Maryland Scholar, Computer Science, Physics, C++ Programming, Marketing, Java Programming

WORK HISTORY

Goodville Mutual Casualty Company **New Holland, PA**
Software Developer June 2018 - Current

- Mainly worked with Java, ColdFusion, JavaScript, Angular, T-SQL, XSLT, SASS, Spring Boot, Drools, PowerShell, and Jenkins CI.
- Exposure to Groovy, JBPM, Gradle, Maven, Ant, DB2, RPGLE, CL, and IBMi system.
- Practiced Agile development with scrum and the Atlassian suite (Jira, Confluence, Bitbucket, FishEye).
- Modernized legacy ColdFusion and Java code to work towards microservices using Spring Boot and Angular.
- Worked with small team to automate commercial umbrella line of business.
- Given the opportunity and support to learn IBMi system, RPGLE, DDS, and CL.