Erik Fox

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EDUCATION

Gonzaga University - Spokane, WA

Bachelor of Science in Computer Science, Minor in Mathematics Expected Grad: May 2019

GPA: 3.01

ACADEMIC EXPERERIENCE

Computer Science I, II, & III:

• Understanding of dynamic memory management and recursion and experience applying such concepts to data structures, including linked lists, stacks, queues, binary search trees, heaps, queues, and hash tables, and determining their cost with big-O analysis.

Object Oriented Programming:

- Completed extensive coursework in Object Oriented in Java and C++.
- Collaborated with a team of students to program a board game in Java.

Organization of Programming Languages:

- Gained an understanding of the core components of programming languages, and applied that knowledge by building a custom language and interpreter.
- Completed comprehensive project-based coursework with multiple programming languages, learning about functional logic based and procedural programming

Operating Systems:

• Experience with operating systems using C and Assembly to gain an understanding of concurrent programs and memory management.

Mobile App Development:

- Developed a wide variety of apps using Android Studio.
- Collaborated with a team to develop a fully featured android application.

Machine Learning and Artificial Intelligence:

- Extensive project-based coursework in Machine Learning techniques, including KNN, Naïve Bayes, Neural Networks, and Recurrent Neural Networks, and vectorized implementation of Linear and Logistic Regression, as well as a vectorized implementation of a neural network.
- $\bullet \quad \text{Experience implementing AI algorithms, including genetic algorithms, } A^*, \text{ and best-first search.}$

Parallel/Cloud Computing:

• Completed coursework in parallel computing and separating tasks across multiple threads, computers, and computer clusters using both C and Cloud Computing with Java and AWS.

SKILLS AND STRENGTHS

- Strong programming experience in, C, C++, Python, C#, PHP, JavaScript, and Java.
- Working knowledge of Assembly, Verilog, F#, Prolog, Haskell, and Lua.
- Creative; Perfectionist/Detail Oriented; Fast Learner; Artistic; Logical; Analytical.

WORK EXPERIENCE

Gonzaga University-Spokane, WA

Summer Research Position:

May 2018 - Present

- Identified specifications for, and designed, developed and deployed a Moodle Plugin to 9gamify the classroom and monitor student engagement to identify impact student performance.
- Responsible for ongoing maintenance of the plugin.

EXTRA-CARRICULAR

Personal Projects:

- Developing a 2D platformer style game with Unity engine.
- Created an android money managing application.
- Designed and developed a personal website (link below).

Hobbies:

• Piano, Rock Climbing, Backpacking, Art, Video Games.

LINKS

- Link to GitHub repository: https://github.com/efox12
- Link to personal website: https://efox12.github.io/PersonalWebsite.io/