

Matt Grant  
mgrant9@uwyo.edu  
DFXLuna.github.io

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## SUMMARY

Product-driven and self-starting computer programmer and student with years of experience in working in communication driven teams.

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## TECHNICAL SKILLS

### Languages

- Fluent in: C (89 & 99), C++ (98 – 14), C#, Python, Typescript
- Familiar with: Bash, Haskell, Haxe, Java, Javascript, SQL

### Technologies

- Debugging: Jest, GDB, MSVC Debugger, PDB
- Linux: Bison, Flex, GCC, Make, etc.
- Version Control: Git, Team Foundation
- Misc.: ASP.NET, Bootstrap, Entity Framework, LINQ, VMWare

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## PROJECT EXPERIENCE

### Decaf Language Compiler Frontend

Fall 2017

- Implemented a compiler frontend for the Decaf language, a subset of Java.
- Lexical and semantic analysis done in Flex++ and Bison respectively
- Fully modular syntax tree generation and type checking done in C++ 98 using object-oriented best practices.

### Unix File System Emulator

Spring 2017

- Simulates disk I/O, partitioning and filesystem actions.
- Object-oriented, top down design in C++ 98.

### A\* Path Finding in Stochastic Game Environment

Fall 2016

- Adaptation of standard A\* algorithm in Java to plan for random noise applied to simulated controller inputs.
- Simulates game state over several frames to determine most desirable inputs.

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## EDUCATION

### University of Wyoming

Anticipated May 2018

- Bachelor of Science in Computer Science
- GPA 3.326

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## WORK EXPERIENCE

### Intern

Jan 2018 - Present

#### *Powder River Industries*

- Working closely with a small team using C# in Unity
- Establishing clear documentation of code and protocols