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pages

in saejinmh
michionlion
michionlion.github.io

courses

- Intro to CS I & II
- Programming Language Concepts
- Theory of Computing & Formal Languages
- Software Testing
- Interactive Entertainment
- Principles of Computer Organization
- Analysis of Algorithms
- Artificial Intelligence
- Multi-Agent & Robotic Systems
- Foundations of Mathematics
- Linear Algebra

languages

C, C#, C++, Java, Lisp, Haskell, MIPS, HTML5, JavaScript (JQuery, NodeJS), CSS3

applications

Adobe Creative Suite, LaTeX, Unity3D, Android SDK, Git, Linux/GNU

gpa

Overall: 3.5
Major: 3.814

awards

Distinguished Alden Scholar

interests

artificial intelligence, compilers, computer visualization, game engines, interactive art, linear algebra, narrative-driven design, programming languages, robotics, software development, video game development, virtual reality development, virtual reality hardware-software interactions

education

since 2015 **Allegheny College** Meadville, PA
Computer Science Major, Studio Art Minor

experience

since 2016 **Computer Science Teaching Assistant** Allegheny College
Computer Science Department
- Answer questions and grade work in lower-level CS classes
- Help plan and create labs, developed script tools to assist with grading
- Tools utilized: *LaTeX, Bash*

Apr–Jul 2015 **Carr Garden Android Application** Allegheny College
Carrden Market
- Developed native Android application to support accounting and transactions for the college garden
- Used Google APIs to sync accounting data and transaction histories among multiple tablets
- Implemented algorithm to create transaction reports
- Tools utilized: *Java, Netbeans, Android Studio, Android SDK*

projects

since 2017 >**brainfuse** Programming Language
*Compiler, interpreter, & language extension of brainf**k*
- Programmed compiler, interpreter, and language extension (including a pre-processor) for the brainf**k programming language
- Implemented pre-processing directives, such as file inclusion, and currently designing more complex psuedo-instruction directives to facilitate the generation of boilerplate code
- Developed multiple command-line tools and script utilities to simplify compiling and running >brainfuse code
- Tools utilized: *C, Bash*

March 2017 **bebop_teleop** ROS Package
Parrot Bebop Drone Teleoperation Node
- Designed and developed teleoperation program to operate Parrot Bebop quadrotor drone
- Implemented greater customizability than other extant tools provide
- Enabled speed configuration changes and camera direction control
- Tools utilized: *C++, SDL, ROS*