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pages

in saejinmh

🔗 michionlion

🌐 michionlion.github.io

courses

- Programming Language Concepts
- Theory of Computing & Formal Languages
 - Software Testing
- Interactive Entertainment
 - Analysis of Algorithms
 - Artificial Intelligence
 - Multi-Agent & Robotic Systems
 - Independent Study (Neuroevolution)
 - Distributed Systems
 - Electronic, Internet, & Intermedia Art I, II & III
 - Linear Algebra
- Combinatorics & Discrete Models

languages

C, C#, C++, Crystal, Java, Golang, Python, JavaScript, HTML, CSS

tools

Adobe Creative Suite, \LaTeX , Unity3D, Android SDK, Git, Gradle, (Ba)sh, Linux/GNU

gpa

Major: 3.888

Minor: 3.500

Overall: 3.613

awards

Distinguished Alden Scholar
Alden Scholar

interests

artificial intelligence, software development, computer visualization, game engines, interactive art, virtual reality development and human-computer interaction

education

Aug 2015 – present

Allegheny College

Computer Science Major, Studio Art Minor

Graduating May 2019

Meadville, PA

experience

Jan 2016 – present

Computer Science Teaching Assistant & Tutor

Allegheny College

Student assistance and education

- Answer questions and grade work in computer science classes
- Help plan and create labs, develop scripts to assist with grading
- Tools utilized: \LaTeX , Bash

May 2018 – Aug 2018

Software Development Internship

Daniel H. Wagner Associates

Data registration for mine-like objects

- Developed and enhanced automated data registration tool
- Optimized linear algebra mathematics library
- Tools utilized: Crystal, C, Bash, Git

Apr 2015 – Jul 2015

Carnden Market Android Application

Allegheny College

Android accounting application

- Developed native Android app to support on-the-go cashiers
- Used Google Drive API to sync data across multiple tablets
- Tools utilized: Java, Netbeans, Android Studio, Android SDK

projects

Feb 2018 – present

GatorGradle

Gradle Plugin

Grading tool for GatorGrader integration

- Develop Gradle plugin to integrate GatorGrader grading checks into a `build.gradle` configuration for easy assignment creation
- Tools utilized: Java, Gradle, Github

Sep 2017 – Dec 2017

py-battle-net

Independent Research

Python-based AI for the game Battleship using a neural network trained by a genetic algorithm

- Programmed feed-forward neural network using matrix calculations
- Developed genetic algorithm for evolving weights in a neural network
- Created terminal-based Battleship game playable by implemented AI
- Tools utilized: Python, NumPy, Matplotlib

Nov 2016 – Dec 2016

Doorway

VR Art Installation

Art with Portals

- Implemented VR (stereoscopic) portal visualization
- Created a stark and mysterious landscape with the aim of evoking a feeling of enigmatic ambience
- Tools utilized: Unity3D, C#, SteamVR, HTC/Valve Vive SDK