

Jacob Grove

grove.217@buckeyemail.osu.edu | 10 W. 9th Ave. Unit A, Columbus, OH 43210 | 513-600-5273
mguard97.github.io

OBJECTIVE

Full-time Game Development position for May 2020 utilizing Unity/C# best practices acquired through coursework and professional development.

EDUCATION

The Ohio State University, Columbus, Ohio

Overall GPA (4.00 scale): 3.69

B.S. Honors Computer Science and Engineering, May 2020

Honors: Recipient of Eminence Fellowship, 2016 - 2020

Dean's List (>3.5 GPA) 5 semesters

QUALIFICATIONS

- Knowledge of game design principles, AI techniques and procedural content generation for video games
- Solid understanding of game development, programming paradigms and software development best practices
- Coursework: Artificial Intelligence, Linear Algebra, Computer Game Animation, Automata and Formal Languages, Database Management, Operating Systems, Computer Networking, Game Design, Game Studies
- Software: Unity Engine, Unreal Engine, Visual Studio, Microsoft Office, Blender 2.8, SQL Server Enterprise, Adobe Photoshop, Illustrator

ENGINEERING PROJECTS

“Design-Centric Maze Generation”, August 2018 - present

- Worked with PhD candidate to develop submission for annual PCG Workshop in San Francisco, CA
- Developed research tool in UnityUI for automating design of maze-like structures with constraints.
- Optimized generation algorithm to search space of 1.4 B maze candidates near instantaneously

“Steelth: Computer Science Senior Capstone”, August - December 2019

- Optimized and extended Goal Oriented Action Planning (G.O.A.P) AI algorithm for Unity in C#.
- Implemented several in-editor tools for level designers using UnityUI.
- Managed production schedule for team of 5, including public presentations and the release of weekly builds.

“Endangered Species Act AR Exhibit”, May 2019

- Implemented gameplay and systems for an interactive art gallery experience with Unreal Engine and C++
- Developed and enforced quality control standards on 3D artists for Vulkan and Android AR

ACTIVITIES AND INTERESTS

- Vice-President, Fishbowl Improvisational Comedy, February 2017 - present
- Personal hobbies are acrylic painting, hearth baking, and acoustic guitar

WORK EXPERIENCE

Ohio Film Group, Columbus, Ohio

Technology Intern, May 2019 – Nov 2019; part-time

- Designed and implemented automated pipeline tools for Shotgun Studio (Python) and Autodesk (C++)
- Conducted market segmentation studies using Steam API, Excel Rest API
- Organized and coordinated regular technical seminars on game development for 3D film artists

AfroDuck Studios, Columbus, Ohio

Lead Programmer, May 2018 - December 2019

- Designed and programmed gameplay for multiple unannounced titles with C# in Unity
- Managed team of 2-4 young programmers
- Interfaced on behalf of studio at trade shows