

Nicholas Rasmussen

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<https://nickrasmussen10.github.io>
Hollidaysburg, PA

TECHNICAL SKILLS

- **Programming Languages:** C#, Javascript, C++
- **Tools:** Unity, Visual Studio, Git, Word, Excel, Powerpoint
- Linear Algebra, Trigonometry, Discrete Mathematics

PROFESSIONAL EXPERIENCE

Game Developer

January – May 2020

MAGIC Spell Studios | Rochester Institute of Technology, Rochester, NY

- Pitched, planned, and developed a 2D platforming video game in the Unity game engine
- Worked extensively with physics-based systems to create reactive real-time player movement controls
- Utilized linear algebra, trigonometry, and raycasting techniques to simulate firing a bow and arrow in 2D space, including simulating physical properties of a flying arrow and detecting and handling arrow-to-game-object collisions
- Programmed the boid algorithm to simulate flocks of autonomous agents, modified the algorithm to support game-specific behaviors such as attacking the player and following and protecting a designated flock leader
- Showcased project progress in weekly meetings with program managers
- Gathered, interpreted, and implemented player feedback

Game Development Instructor

July – August 2019

iD Tech Camps | Allentown, PA

- Taught teenage students week-long game development courses including gameplay programming with C# in Unity, 3D modeling in Autodesk Maya, and level design in Unreal Engine
- Learned new technical skills on a tight deadline

Software Development Intern

May – August 2018

Link Computer Corporation | Bellwood, PA

- Utilized Windows Task Scheduler to fully automate the monthly transfer of a client's backup data from local storage to Amazon Web Services cloud storage via the execution of a custom script
- Programmed reactive and user-friendly Excel macros in Visual Basic to modify and add data to company spreadsheets, as well as import and export spreadsheet data to CSV files
- Revised a client's survey software to meet updated requirements by writing custom JSON objects which modified the contents of a questionnaire in response to previously answered questions

EDUCATION

Rochester Institute of Technology, Rochester, NY
B.S. in Game Design and Development

August 2023