

# Zizhun Guo Jan 11<sup>th</sup>, 1994

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## EDUCATION

<b>Rochester Institute of Technology</b>	Rochester, NY	2018.8-present
Master of Science in Computer Science		
<i>Relevant Courses: Data Structure and Algorithm, Object Oriented Programming</i>		
<i>Computer Science Theory, Compiler Construction, Advanced Programming Skills</i>		
<b>Rochester Institute of Technology</b>	Rochester, NY	2016.8–2018.5
Master of Science in Game Design and Development		
<i>Relevant Courses: Gameplay Prototyping, Artificial Intelligence for Gameplay</i>		
<i>Game Development Processes, Capstone Design and Development</i>		
<b>Chengdu University of Information Technology</b>	Chengdu, China	2012.9-2016.6
Bachelor of Engineering in Electronic and Information Engineering		
<i>Relevant Courses: Calculus, Linear Algebra, Probability and Statistics</i>		
<i>C Language Programming, Microprocessors and Microcomputer System</i>		

## EXPERIENCES

<b>Personal Website: Zizhunguo.com</b> (HTML, CSS, JavaScript, Bootstrap, Jekyll, Git)	2019.5-present
<i>Independent Project, Rochester Institute of Technology</i>	
<ul style="list-style-type: none"><li>• Employed Jekyll static site-generator to construct the website's framework</li><li>• Used HTML, CSS, and Bootstrap to implement the design of layout</li><li>• Used Liquid to implement blog functionalities, i.e. Page display by tags, Varied Page layouts</li><li>• Took Online Courses from Udemy to acquire bootstrap knowledge for website pre-design</li><li>• Used Git for version control</li></ul>	
<b>Compiler Construction</b> for Haskell-like ALTO to JVM code (Clojure, Emacs, JVM)	2019.3-2019.5
<i>Course Project, Rochester Institute of Technology</i>	
<ul style="list-style-type: none"><li>• Accomplished using Clojure (Lisp dialect) to implement a compiler of a Haskell-type language Alto with large grammar. The code generated by it can be ran on Java Virtual Machine</li><li>• Implemented a LL(1) parser that constructed with two-stacks structure for semantic analysis</li><li>• Optimized the compiler by transforming the declaration tree into a new simpler tree in type checking Step. Reduced the number of forms, annotated calls and tail calls</li></ul>	
<b>Sudoku Application for Design Patterns</b> (C#, Visual Studio, WPF, MVVM)	2019.4-2019.5
<i>Course Project, Rochester Institute of Technology</i>	
<ul style="list-style-type: none"><li>• Achieved to create the Sudoku puzzles of unique answers by using backtracking algorithm</li><li>• Used Windows Presentation Foundation to design and develop the front-end of the game application</li><li>• Employed the MVVM design pattern to construct the application by implementing XAML to mark the layout</li></ul>	
<b>Capstone Game Application Development: Cat Kart</b> (C#, Unity3D, UNet, HTC Vive, VRTK)	2017.8-2018.8
<i>Graduation Project, Rochester Institute of Technology</i>	
<ul style="list-style-type: none"><li>• Performed as the core developer and designer for both gameplays and levels</li><li>• Accomplished to develop the cross-platform real-time interaction between Virtual Reality end and PC end</li><li>• Used Unity Network High Level API to implement all functionalities required through internet</li><li>• Reduced motion sickness and improved frame rate by applying LOD group from Unity rendering components</li><li>• Used SourceTree for version control with a developing team of Four that utilizing Agile Methodology for developing</li><li>• Worked as a exhibitor in Annual Innovation Event Imagine RIT to demonstrate the project</li></ul>	
<b>Student Employee at Bytes on The Run</b>	2017.8-2018.5
<i>Student work, Rochester Institute of Technology</i>	
<ul style="list-style-type: none"><li>• Conducted transactions for customers, conduct inventory and restocking</li></ul>	

## SKILLS

Languages	C/C++ (1 year), C# (3 years), Java (1.5 years), Python, Clojure, HTML, CSS, JavaScript
IDE	Unity3D, Visual Studio, Emacs, Eclipse, Sublime Text, IDLE, PyCharm
Framework	Jekyll, Bootstrap, WPF, ASP.Net, OpenGL
Concepts	OOP, MVC, MVVM, ESC, Design Patterns, Unit Test
Version Control	Git, SourceTree, GitHub, Bitbucket