

EDUCATION	<b>UNIVERSITY OF MICHIGAN</b> <b>College of Literature, Science, and the Arts</b> Bachelor of Science – Computer Science, May 2016 – <b>GPA: 3.46</b> <ul style="list-style-type: none"><li>• <b>Highly Skilled:</b> C++</li><li>• <b>Worked in:</b> C#, Objective-C, Python, Java, JavaScript, HTML, CSS, MySQL</li><li>• <b>Environments:</b> Visual Studio, Xcode, Unity, Qt</li><li>• <b>Version Control:</b> Git, Perforce</li></ul>	<b>Ann Arbor, MI</b>
EXPERIENCE	<b>DEEPSILVER VOLITION</b> <b>Gameplay Design Intern</b> <ul style="list-style-type: none"><li>• Designed and implemented combat mechanics to shape ideal player experiences in Volition's next unannounced title</li><li>• Developed my logical thinking skills with Volition's visual scripting language</li><li>• Gained valuable team and communication experience by bridging the disciplines of Art, Programming and Design to create one cohesive player experience</li></ul>	<b>Champaign, IL</b>
Summer 2015		
Summer 2014	<b>DETROIT LABS</b> <b>iOS Mobile App Development Intern</b> <ul style="list-style-type: none"><li>• Created specialized and compelling mobile experiences for high profile clients such as Kimberly Clark, Caesars Entertainment, and the Detroit Police Department</li><li>• Formed communication skills to productively cooperate with team members of various roles</li><li>• Learned how to break down a project into easily digestible tasks, distribute the team's resources to effectively complete those tasks, and how to realistically estimate completion time</li><li>• Interacted with clients to guide the creation of a powerful product while grounding the conversation with practical expectations</li></ul>	<b>Detroit, MI</b>
Summer 2013	<b>UNIVERSITY OF MICHIGAN 3D LAB</b> <b>GUI Programming and Design Intern</b> <ul style="list-style-type: none"><li>• Built a graphical user interface that is used to load demo settings for Jugular, a vector modeling software that works in tandem with a Cave Artificial Virtual Environment</li><li>• Implemented a GUI that loads elements from an XML file, sensibly groups them in tabs, and offers a sleek interface with an appealing style and dynamic resizing</li><li>• Became familiar with the Qt IDE, specifically how to design a user-friendly interface, how to read in XML files and how to organize information intuitively</li></ul>	<b>Ann Arbor, MI</b>
PROJECTS	<ul style="list-style-type: none"><li>• Created software that simulates naval warfare and takes advantage of design patterns such as the Component/Composite and Template patterns to ensure readable and extensible code</li><li>• Designed a search engine that parses through documents using the MapReduce model with Hadoop to efficiently create an inverted index file. This made the search engine roughly as scalable as Google's was in 2004. PageRank, Term Frequency, and In-Document Frequency were also used to determine the relevancy of pages in relation to the query</li><li>• Wrote a program that estimated the optimal solution to the Traveling Salesman Problem by using greedy algorithms along with branch and bound to balance efficiency and accuracy</li><li>• Used Unity 3D to create a Google Cardboard augmented reality app that uses facial recognition to display info about a person that the user is looking at</li></ul>	
ACCOLADES	<ul style="list-style-type: none"><li>• Earned 2<sup>nd</sup> amongst 238 teams and over 1,000 participants at the University of Michigan 38-hour Hackathon for my team's project, the <i>Harry Potter Broom Flight Simulator</i></li><li>• Placed 2<sup>nd</sup> amongst 10 teams in the Michigan Game Development club's 48-hour Turkey Game Jam with our submission, <i>Jake's Nightmare</i>, written in JavaScript and playable at jkotzian.com</li><li>• Achieved 3<sup>rd</sup> amongst 22 teams in the Michigan Game Development club's 38-hour Game Jam with my team's submission, <i>Perdition</i>, also playable at jkotzian.com</li></ul>	