# Kritan Aryal

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### **EDUCATION**

The University of Toledo **Anticipated Graduation Date: May 2026 GPA: 3.768** 

Bachelor of Science: Computer Science

Minor: Data Science, Mathematics and Graphic Design certificate

President's List (2021, 2022, 2023), Dean's List (2021, 2022, 2023), Russell J. Ebeid Scholar (2023)

Certifications: Dale Carnegie (2022), Six Sigma: Green Belt (2023)

Leadership: Secretary (NSO – 150+ members), Member (100s group, Nepal)

### **RELEVANT PROJECTS**

### Immersive AR Interaction – Unity, RealityKit, ARKit, Swift (2024)

Built an innovative augmented reality experience for VisionOS, seamlessly integrating Unity's assets with RealityKit and Swift for a user-friendly experience, showcasing proficiency in AR game development and user interaction design.

#### Personal Website – React, HTML, CSS (2023)

Created a personal website using React JS, featuring comprehensive information about my background, projects, and resume demonstrating proficiency in web design, front-end development, and content presentation.

### Amusement Park Simulation – Data Structure (2023)

Engineered a cutting-edge Amusement Park Simulation in Java, meticulously modeling rides, visitor behavior, and park operations from dawn till dusk, demonstrating expert knowledge in system simulation and advanced data structures.

#### **Tower of Hanoi** – Data Structure (2023)

Created an efficient algorithm in Java, showcasing strong recursion proficiency resulting in the solution that elegantly addresses the puzzle's challenge, demonstrating a clear understanding of algorithmic principles.

## Roll the Ball – C++, Blueprint, Unreal Engine 5 (2022)

Designed a basic ball-rolling game using Blueprint and C++ in Unreal Engine 5, requiring users to follow a precise set of instructions to achieve victory demonstrating proficiency in object-oriented programming and user engagement.

#### **EXPERIENCE**

# **Engineering Intern - First Solar Inc.**

# August 2023 - Present

- Built a Python program to automate the retrieval of warehouse stock reports from Oracle and order parts accordingly using selenium form web scraping, leading to 90% improvement in parts availability and 83% reduction in downtime.
- Developed specialized JMP scripts for edge seal dispenser extracting data from SQL, delivering precise shot weights and ratio of each nozzle head, including control limit and specification limit, resulting in accurate data accessibility.
- Boosted module data retrieval speed by 3 times by integrating a SubID search feature in FIN1 JMP script.
- Debugged and revitalized 10+ scripts, rescuing valuable codes ensuring seamless compatibility with newer JMP versions.
- Conducted a DMAIC analysis to address low throughputs during shift changes using fishbone and 5 Whys methodologies to identify bottlenecks and implemented targeted solutions to achieve a 14% increase in throughput.
- Engineered specialized tools using SolidWorks to ensure worker safety when cleaning automated machines, creating a safer workspace, and mitigating the risk of work-related accidents and promoting a culture of safety-first.

### **Engagement Ambassador - The University of Toledo Foundation**

### **September 2021 – May 2022**

- Initiated effective communication with university alumni, conducting surveys that resulted in a 20% increase in participation and a 15% boost in contributions to the foundation, fostering a stronger sense of community support.
- Demonstrated strong teamwork, and communication playing a pivotal role in conducting a successful fundraising campaign, raising \$1.9 million during the Giving Day, surpassing previous year's total by 46%.

### **SKILLS**

Programming: Python, Java, JavaScript, C++, R, React JS, JMP script, Swift, HTML, CSS

Software: Figma, MATLAB, Power BI, Minitab, SQL Server Studio, Visio, GitHub, MS Office, SolidWorks, Eclipse

Industry: Statistics, Design of Experiments, Root Cause Analysis, Scrum Agile, FMEA, DMAIC, Debugging