NATHAN KRIKAWA

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OBJECTIVE

To obtain a full-time position after graduating in May 2025 that will provide engineering work experience utilizing and developing analytical, technical, and design skills.

EDUCATION

Northern Arizona University, Flagstaff, AZ — May 2025
Bachelor of Science in Multidisciplinary Engineering – Design Emphasis
GPA: 3.73 Dean's List: Fall 2021, Fall 2022, Spring 2023, Fall 2023

Salpointe Catholic High School, Tucson, AZ — 2017–2021
STEM Program. Distinguished Scholar Honor Roll. “Outstanding Junior of the Year” in Engineering.

TECHNICAL SKILLS & TOOLS

Rhinoceros 3D/Grasshopper	Ultimaker Cura	SolidWorks	Blender	Unreal Engine
CNC/Lathe/Vertical Mill	Microsoft Office	Adobe Creative Suite	MATLAB	

3D CONCRETE PRINTING RESEARCH & PRESENTATIONS

Dymond, B.Z., Krikawa, N. (2024). “Optimization of a 3D Concrete Printer to Create Structural and Artistic Objects.” *ASCE-ASHE State Conference*, Oct. 24, Phoenix, AZ.

Structural Support Systems for 3D Concrete Printing — NAU Jean Schuler Grant — Sep 2024-May 2025

- Research and development of structural support systems for implementation while 3D printing concrete to expand the possibilities of NAU’s concrete 3D printer. Developed G-code with Rhino’s Grasshopper application to create optimal pathing for supported structures.

Krikawa, N., Dymond, B.Z. (2024). “Optimization of a 3D Concrete Printer to Create Structural and Artistic Objects.” *NAU Undergraduate Symposium*, Apr. 26, Flagstaff, AZ.

Optimization of Concrete 3D Printer — NAU Interns-to-Scholars Program — Spring 2024

- Installed and operated NAU’s concrete 3D printer, optimizing the printing process and parameters. Modeled, sliced, and printed NAU’s first concrete 3D prints.

ACADEMIC PROJECTS & COURSEWORK

ME 476/486: 3D Printing in Metal — Spring 2024-Fall 2025

- Installed a Concept Laser Mlab cusing R metal SLM printer in NAU’s IDEA Lab. Going to use FEA and topology optimization to demonstrate the capabilities of metal additive manufacturing as compared to subtractive manufacturing in a final complex print.

ME 386W: Engineering Design: The Method — Spring 2024

- Designed a delivery drone with a team, involving technical, cost, and ethical analyses. Fully modeled and animated a demonstration of the drone using Blender and Solidworks.

ART 274: New Media: 2D/3D Digital Fabrication — Spring 2024

- Designed a 3D dwarf bust in Blender, sliced it in Cura, and printed it in the Maker lab in the Cline library.

ART 174: New Media Foundations — Spring 2023

- Completed multiple projects including animations and videos through the use of Unreal Engine and Adobe Creative Suite, specifically Photoshop and Premiere Pro.

Coursework:

Introduction to Engineering Design | Programming for Engineering and Science | Computer Aided Design | Innovation and Design Thinking | Materials Science | Applied Mechanics Dynamics | Applied Mechanics Statics | Mechanics of Materials | Structural Analysis | Engineering Analysis | Machine Design 1 | New Media: Age of Anthropocene | Engineering Design: The Process | Engineering Design: The Method | New Media: 2D/3D Digital Fabrication

WORK EXPERIENCE

- *Undergraduate Research Assistant*, 3D Concrete Printing, NAU — Aug 2024–May 2024
- *Landscaping Laborer*, Morning Dew Landscaping, Flagstaff — May 2023–Aug 2023
- *Graphic Designer*, Krikawa Jewelry Designs, Inc, Tucson, AZ — Jul 2020–Dec 2020

- *Data Entry Clerk*, Krikawa Jewelry Designs, Inc, Tucson, AZ Jan 2020–Jul 2020