

Chrystina (Chrys) Woehler

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SUMMARY

I'm an interdisciplinary engineer, artist, and developer with experience in mechanical design, 3D modeling/animation, scientific visualization, and game development. My work focuses on combining technical problem solving, visual communication, and artistic design to develop compelling solutions across technical and creative environments. I have a passion for education and entertainment and am always striving to make both more accessible to all.

EDUCATION

University of Florida, Gainesville, FL

May 2025

- BS in Digital Arts and Sciences (Computer Science), Minor in Electrical Engineering

TECHNICAL SKILLS

- *Computer Languages*: Python, C++, C#, Processing, MATLAB, HTML, Java, Lua, R, Assembly,
- *Tools*: Maya, Blender, Cinema 4D, Substance Painter, Unity, Git, Adobe Photoshop, After Effects, Revit, AutoCAD
- *Certifications*: SOLIDWORKS CSWA-Mechanical Design Certification
- *Skills*: 3D character animation & modeling, UV/texturing, rigging, traditional & digital illustration

WORK EXPERIENCE

Mechanical Engineer, *Matern Professional Engineering*, Maitland, FL

August 2025 to Present

- Support public school districts in the planning, design, and modernization of educational facilities.
- Perform HVAC system design, existing building assessment, as-built validations, and construction phase support for renovations and new construction projects.
- Collaborate with multidisciplinary teams, architects, and school district stakeholders to develop practical, code-compliant, and maintainable mechanical solutions that support long-term campus performance and student comfort.

Undergraduate Teaching Assistant, *UF Dept. of CISE*, Gainesville, FL

January 2022 to May 2025

Aided in facilitation of CAP3220 Intro to Computer-Aided Modeling and CAP3034 Intro to Computer-Aided Animation

- Helped students become familiar with Blender software and the principles of 3D modeling and animation.
- Standardized course structure by redesigning assignments and creating rubrics to improve consistency and reduce grading inconsistencies across semesters.
- Iteratively improved course materials based on student feedback to enhance assignment quality and student outcomes.
- Graded coursework, provided detailed feedback, and conducted office hours for individualized technical support.

NSF-REU Fellowship Student Researcher, *UF Dept. of Chemical Engineering*, Gainesville, FL

May 2024 to August 2024

- Collaborated with Digital Arts and Sciences and Chemical Engineering departments through the NSF-REU program to translate cellular research data into 3D models and animation.
- Researched and developed methods for visualizing and simulating cellular migration and eversion using Maya.
- Developed a basic Unreal Engine prototype to demonstrate possibilities for interactive cellular migration demonstrations.

PROJECTS & LEADERSHIP EXPERIENCE

Soft-Matter Journal Cover Art, *UF Department of Chemical Engineering*

August 2024

- Created fully rendered 3D visualization for Soft Matter Journal (Issue 38, 2024) as cover art for research presented in the article "Rethinking nuclear shaping: insights from the nuclear drop model".
- Completed within a one week timeline with client feedback iterations.

Persona Pro, *Human-Computer Interaction – CEN4721*

May 2024 to August 2024

- Developed a Unity-based prototype character creator interface to study UX approaches for character customization, creating two interface versions for comparative user testing with 30 students over a semester.

Lab Collaboration Initiative, *UF Dept. of Computer & Information Science & Engineering*

January 2023 to April 2023

- Coordinated with three research labs on campus to design a student project focused on creating scientific visualizations from real research data, aligning expectations, visualization goals, and deliverables.
- Developed assignment structure, requirements, and grading rubrics aligned with research objectives and technical constraints.
- Created supporting 3D models and reference assets to assist student groups in producing informed visualizations.