Job Title: Digital Fabrication Research Technician
Department: Academic Services
Division: Academic Affairs
FLSA Status: Non-Exempt
Reports to: Digital Fabrication Studio Manager
Work Schedule: Part time 15-25 hours per week | regular business hours, evenings, and weekends | 1 year appointment

General purpose: The Digital Fabrication Studio Research Technician assists with the day-to-day operations of the Digital Fabrication Studio, supports research in the studio, and has access to the facility to pursue individual research outside of work hours. This appointment is for 1 year and is not renewable.

Summary of Essential Functions
- Assist with the day-to-day operations and maintenance of the Digital Fabrication Studio, ensuring that all equipment operates effectively and safely, the facilities are clean and efficient, and supplies are stocked and available.
- Serve as an educational resource, and support Undergraduate, Graduate, Post-Bac, and Continuing and Professional Studies students regarding related processes of digital fabrication.
- Provide assistance to the Digital Fabrication Studio Manager.
- Provide focused support for resources related to approved research.

Essential Duties & Responsibilities:
- Assist with, maintaining EHS compliance, conducting EHS training for MICA employees working in the Academic Services Fabrication Studios, maintaining required EHS documentation, enforcing EHS policies, modeling safe studio practices, and generally ensuring safety.
- Provide technical support to students in the Digital Fabrication Studio.
- Assist with monitoring and maintaining equipment in the Digital Fabrication Studio.
- Enforce studio policies and demonstrate the safe and appropriate use of equipment, tools, materials, techniques, and processes in the Digital Fabrication Studio.
- Provide assistance and guidance to the Digital Fabrication Student Technicians and work-study.
- Contribute to online tutorials for processes and software used in the Digital Fabrication Studio.
- Support workshops on digital fabrication processes and related software for undergraduate students, graduate students, faculty, and staff.
- Help maintain supplies for the Digital Fabrication Studio by communicating with the Studio Manager.
- Share research to enhance the Digital Fabrication Studio and classes held therein.
- Perform other related duties as assigned.

Knowledge, Skills, and Abilities
- Practical working experience laser cutting, 3D printing, and CNC Milling
- Knowledge of 3D software for computer aided design, and computer aided machining
- Good mechanical sensibility
- Ability to assess and trouble-shoot digital fabrication equipment
- Strong organizational skills
- Ability to collaborate with students and faculty
- Good communication skills

Minimum qualifications:
- BFA or a four year degree with experience working in a digital fabrication studio
- 1+ years’ experience working with 3D modeling and CAM software
- 1+ years’ experience operating 3D printers, laser cutters, and CNC mills/ routers

Preferred Qualifications:
- 2+ years’ experience working with 3D modeling and CAM software
- 2+ years’ experience operating and maintaining 3D printers, laser cutters, and CNC mills/ routers
- 1+ years’ experience working as a technician in a digital fabrication studio, preferably in an academic environment
• Experience working with Objet printers, Z-Corp printers, RepRap printers, Roland CNC mills, and 4x8 CNC routers
• Skills in Rhino, RhinoCAM, and Grasshopper
• Skills in Illustrator, Photoshop, and Corel Draw.
• Knowledge of electronics and experience working with Arduino
• Knowledge of programming/scripting languages such as Python, Processing, or C
• Experience building 3D printers and other digital fabrication machinery

Reporting to this position:
• No direct reports

Conditions of Employment:
• Candidate must successfully complete a full background check
• Occasionally required to work evenings and weekends

Applicant Instructions:
Submit online 1 PDF document to include:
• Resume
• Cover Letter (1 page single spaced, 12pt) – qualifications, experience, what interests you about this position?
• Portfolio of Related Work – website (preferred) or PDF at reasonable resolution. Images should include descriptions about the project.
• Research Project Proposal (1-2 pages) – Explain your project and how you intend to use your time allotted to research. How will this research benefit dFab or MICA? How could this opportunity launch your career? Specifically what about dFab will allow you to perform this research?

Please format the PDF document for screen resolution and viewing. No physical media are requested nor will be returned.

Physical demands and work environment: The physical demands and work environment characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

• Physical Demands: While performing the duties of job, the employee is occasionally required to stand, walk; sit; use hands to finger, handle, or feel objects, tools, or controls; reach with hands and arms; balance; stoop; talk or hear. The employee must occasionally lift up to 45 pounds. Specific vision abilities required by the job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.
• Work environment: While performing the duties of the job, the employee is exposed to weather conditions prevalent at the time. The noise level in the work environment is usually minimal, but ear protection is required at times.

General sign-off: The employee is expected to adhere to all company policies.

I have read and understand this explanation and position description.

Signature: __________________________ Date: ____________

Human Resources:
Date Created/Revised: 03/25/2015