**UDRAW Fall 2025 Position Descriptions**

***Additional Positions Forthcoming***

## Art Conservation

**Job Description:** Professor looking for a student who can read "old" Spanish (e.g., Gothic font) and transcribe it to modern Spanish. If you are interested in 16th and 17th century manuscripts, this is the job for you. The work involves reading and transcribing manuscripts. We currently have photos, but we can arrange for in-person reading.

**Key Skills:**

1. Must be able to read "old" Spanish, mostly Gothic, no spacing between words.
2. Ability to work independently.

Time commitment can be negotiated and is flexible.

**Contact:** Please contact Dr. Jocelyn Alcantara-Garcia joceag@udel.edu. Use the Subject "UDRAW position Application."

## Art and Design

**Job Description**
Raven Press is an experimental letterpress printing facility located on the second floor of the Studio Arts building near the Old College (North) campus of the University of Delaware. Art & Design Department professor Katie Leech maintains the press and advocates for the importance of typography and physical processes in student education.

This project will allow all students to explore an experiment with typography using a hands-on printing process. While exploring you will also help create an inventory and clean and organize the thousands of letters we have collected for the past 20 so years. There has been interest in having a better understanding of what the letterpress is, historically, and how it works to create content for the masses. Students in English, art, and design have enjoyed the opportunity to work with moving type to create images and printed work like poetry booklets, zines, and small publications.

**Time Commitment:**
Hours/Week: 5-10

**To Apply:** If interested, please contact Katie Leech by email, katiefai@udel.com,
You must be available on Monday or Wednesday.

Required skills:
1. Be in good academic standing (GPA of 3.0 or higher)
2. Be interested in student learning
3. Be organized
4. Have good time management skills
5. Have good communication skills
6. Be attentive to detail
7. Be able to commit to at least 5 hours of work per week (limit of up to 10 hours)
8. Be interested in learning about typography & printmaking (non-artists are welcome)

Subject Line:
Raven Press Research Assistant

The following information:
1. Name
2. Weekly Hours of Availability for the Fall 2024 Semester
3. Cell phone number
4. Preferred email address
5. A short statement about your interest in working at Raven Press.
6. Resume or CV (optional)

## Human Development and Family Studies

The Queer Development Lab leads research projects on LGBTQ youth, health disparities, and family relationships. In one of our current project, the *LGBTQ Socialization Project,* we study the processes through which lesbian, gay, bisexual, trans, and other queer (LGBTQ) teens and young adults learn from others how to build community bonds, strengthen and understand their LGBTQ identity, and develop skills for navigating discrimination. The long-term goal of our current projects is to understand how families contribute to positive LGBTQ youth development.

Primary tasks for research assistants will be:
- Reviewing and summarizing academic literature on LGBTQ youth development and mentoring
- Editing transcripts and preparing them for analysis
- Literature review and data extraction for summarizing family impact on LGBTQ youth development

Students seeking this opportunity should have experience or interest in working with LGBTQ individuals and issues. Research assistants may have opportunities to work in a limited capacity on other related LGBTQ research projects based on their interests and project needs. Research

assistants will be expected to meet weekly with all members of the Queer Development Lab, led by Dr. Eric Layland.

**Time Commitment:** Up to 10 hours/week
**How to apply:** Follow this link to submit your resume and indicate your interest in working in the Queer Development Lab. For questions: layland@udel.edu. You may submit your interest form directly without contacting Dr. Layland.

## Education

**MATHEMATICS METHODS AND MOTIVATION LAB**
**School of Education**
**Faculty Mentor(s):** Christina Areizaga Barbieri
**Hours/Week:** 8-10

Dr. Barbieri's research program centers broadly on instruction for students who struggle in math. Specifically, her work focuses on the evaluation and application of learning principles to improve mathematical competencies and motivation for math, especially for students at risk for low mathematics achievement. Dr. Barbieri studies mathematical competencies from preschool to adulthood. A core part of her work aims to understand how common mathematical errors can be used most effectively to reduce misconceptions and improve learning in math content areas that students commonly struggle with. Recently this has involved both algebra and fractions, both gateway topics for success in STEM disciplines and careers. Dr. Barbieri also considers the role of motivation and attitudes towards mathematics in student learning.

In 2025, Dr. Barbieri's various projects on mathematical cognition and learning will have a range of both in-person and remote activities for an undergraduate scholar to receive mentoring in, such as analyzing students' problem-solving skills and explanations, reading and coding/note-taking literature, creating databases, coding for meta-analyses, preparing conference submissions, and potentially collecting data in classrooms. This apprenticeship can either be in-person or remote and mainly asynchronous for Spring 2026, with the exception of some in-person meetings each week. Preference given to those who are interested in participating in in-person data collection in local schools but this is not required.Those interested in mainly remote work should specify that when applying. This position is currently only available to undergraduate students who qualify for federal work study. See the UDRAW program website for more information on how to check your qualifications.

Please contact Dr. Christina Barbieri – barbieri@udel.edu for more information.
More information about Dr. Barbieri's lab can be found here: https://sites.udel.edu/barbieri/
**Required Skills**

- Be in good academic standing (GPA of 3.0 or higher)
- interested in student thinking and learning
- Diligent, organized and attentive to detail

- Have good time-management skills
- Have a stable Wifi connection and access to a laptop
- Be able to commit to at least 8 hours a week (up to 10) of work (excluding finals week).

**Recommended Skills**
The following are **preferred** but not required:

- Education, Psychology, or other Social Sciences majors preferred.
- Have experience using Excel.
- Have experience using R, SPSS or another statistics software.
- Some experience tutoring mathematics (at any grade level)
- Comfortable thinking and talking about mathematics (at various grade levels)
- Interest in attending graduate school
- Availability to stay on for fall 2025 if interested and in good standing.

## Education

**Job Description**

The Birds and the Bees: asdsexed.org is the largest repository of resources for teaching sex education to people with intellectual and developmental disabilities including autism.

**Research assistants will**

- Identify and explain existing sex education resources for the website;
- Create a database of sex educators who focus on disability from across the country; and
- Translate research articles for lay audiences.

**Required Skills**

- The ability to work independently.
- Comfort with sensitive topics.
- Clear writing.

**Recommended Skills**

- Comfort with WordPress.
- Comfort with Canva.

**Contact:** Sarah Curtiss – curtiss@udel.edu

## Environmental Science

**Project Description**: We are seeking a student who is interested in environmental science and sustainable agriculture to assist with a data synthesis project on nitrogen losses from agricultural systems and our ongoing greenhouse and field experiments. The data synthesis is a collaborative research project that will involve reading through the scientific literature and extracting data from papers, organizing data, and regularly sharing findings with a group of researchers. Additional tasks may include field work such as collecting plant or soil samples and assisting with lab work.

**Required Skills:** Ability to read scientific papers and extract key information, attention to detail, and good organizational skills.

**Time required**: Up to 10 hours per week, flexible.

**Contact**: Email Alex Huddell at ahuddell@udel.edu with the subject line "**UDRAW position application**". Please send the following information:

1. Resume/CV
2. Short description of your interest in the position
3. Weekday availability

## Fashion and Apparel Studies

**Project Description:** Fashion History and discovery #1. We are seeking a student interested/knowledgeable in fashion history, history. art conservation, or material culture. Includes hands-on work in the Historic Fashion and Textile Collection and working with the FTC database and contributions to an upcoming exhibition of 1920s garments.

**Contact:** Dr. Belinda Orzada - orzada@udel.edu

## Fashion and Apparel Studies

**Project Description:** Fashion History and discovery #2. I am seeking a student to explore the phenomenon of "semi-made" garments the 1920s. Assignments will include library database

research, and online museum website research, Some hands-on work in the Fashion and Textile Collection. Organizational skills and attention to detail are a must; strong interest in fashion history preferred.

**Contact**: Dr. Belinda Orzada - orzada@udel.edu

## Fashion and Apparel Studies

The Wearable Innovation Lab in the Fashion and Apparel Studies Department is looking for a student interested in helping with current knitwear research projects using Shima Seiki technology. Under the supervision of Dr. Adriana Gorea, the student will learn the basics of programming and knitting fabric samples along with cataloging and conducting basic textile testing. Responsibilities will include managing the yarn and fabric database.

**Contact:** Adriana Gorea - agorea@udel.edu

## Fashion and Apparel Studies

ReSpool Project

Professor Kelly Cobbb/The Department of Fashion and Apparel Studies seeks two UDRAW students.

The research assistant provides support to ReSpool (@applied_materiality) researchers in the lab and in writing up current research projects.
ReSpool is an interdisciplinary research platform that looks at collaboration potential of fashion and textiles to science, art and the humanities.

**Studio/lab/making:**

- Fabricate composite components, structures, and test articles per instructions. (studio textile)
- Routine preparation of samples for analysis or testing . (studio textile)

**Literature review/research writing:**

- Keeps abreast of developments in the area of expertise and related scientific fields through reading of scientific journals and technical papers.
- Write annotated bibliography/Literature review reports in the work performed in the form of international research reviews and external progress reports.
- Perform other job-related duties as assigned.

**Contact**: Kelly Cobb – kcobb@udel.edu

## FinTech Innovation Hub

**Project Description**

The FinTech Innovation Hub, co-led by Dr. Nektarios Tsoutsos and Dr. Gang Wang, accelerates FinTech innovation and education in the Delaware region through interdisciplinary research, industry collaboration, and experiential learning to advance financial health and empower underserved communities.

- The hub is seeking a motivated student intern/research assistant to support the Hub's operations,
- events, and research activities. This role offers hands-on experience in FinTech, event
- coordination, and applied research, with opportunities to develop both technical and
- communication skills. Some key responsibilities include:
- Conduct information searches and gather updates (e.g., FinTech regulations)
- Track and analyze data, including text analysis (e.g., summarizing FinTech relevant
- courses)
- Design promotional materials such as posters
- Assist in facilitating events and analyzing event impact
- Edit and contribute to the Hub's newsletter

**Preferred Qualifications**

- Interest in FinTech and willingness to learn
- Some technical background (data analysis, design tools, or programming experience a
- plus)
- Be organized and have good time management skills
- Strong communication skills

**Time Commitment:** Approximately 5-10 hours per week, with flexibility based on the student's availability and the hub's event schedule.

**To apply for this role**, please contact us (fintechhub@udel.edu) with the following information
Subject Line: [Work-Study] FinTech Innovation Hub Student Research Apprenticeship
The following information:
1. Name
2. Weekly Hours of Availability for the Fall 2025 Semester
3. Preferred email address
4. A short statement about your motivation/interest in working for the FinTech Innovation Hub
5. Resume or CV with information on educational/technical background and past projects

## Marine Science and Policy

**Project Description**

The Carlisle Lab in the School of Marine Science and Policy (College of Earth, Ocean, and the Environment) is seeking an undergraduate student to work on projects using stable isotope analysis (SIA) to investigate a variety of marine ecological questions. Some of the current SIA projects include investigating the ecological role of sharks in coastal Delaware and Virginia as well as building a food web model of an oyster reef within Delaware Bay. We are seeking an undergraduate student to assist in the laboratory processing of tissue samples for SIA. This work will include all steps needed to prepare SIA samples for processing including fish ID/dissection, chemical treatments on samples, and boating samples for SIA analysis. The undergraduate student will not only work directly on active research, but they will also develop valuable laboratory skills and learn relevant theory. The expected time commitment for this position is 5-10 hours/week and the laboratory work will take place at UD's marine campus in Lewes.

**Qualifications**

- Able to work on the Lewes campus at least 1 day a week
- Strong organizational skills
- Background or interest in marine ecology
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**Contact:** Dr. Aaron Carlisle (carlisle@udel.edu)

## Computer and Information Sciences

### UDRAW Work-Study Position: UI/UX Software Engineer (Blue Hen Bites)

**Department/Team:** CIS Talent Committee / Blue Hen Bites Project
**Supervisor:** Academic Coordinator, Computer & Information Sciences
**Location:** Newark, DE (hybrid; on-campus meetings + remote work)
**Dates:** Fall 2025 - Spring
**Hours:** 8–15 hours/week (flexible around classes)
**Compensation:** $15.00/hour (paid through UD Workforce)

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### About the Project

Blue Hen Bites is a campus food-ordering marketplace for student-run kitchens and local vendors. We're building a lovable, student-first product—simple, accessible, and fast. You'll help design and implement a usable, delightful interface and ship functional UI components into our existing Python (FastAPI) backend.

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### What You'll Do

- **Design a clickable mock-up** of core flows (browse, search/filter, add to cart, checkout, order status) using **lovable.dev** (for rapid scaffolding) and a design tool (e.g., **Figma** or **Penpot**).
- **Build functional UI components** (HTML, JavaScript, CSS) and integrate them with our **FastAPI** endpoints (OpenAPI/Swagger docs provided).
- **Create a small component library** (buttons, inputs, cards, modals, toasts) with responsive, accessible patterns.
- **Instrument UX analytics** (empty state tracking, error surfaces, basic funnel events) and address **accessibility** (WCAG 2.1 AA) and mobile-first responsiveness.
- **Use AI tools thoughtfully** (e.g., **ChatGPT** for wireframe variations, content/copy, code reviews, and test generation) while keeping human-centered judgment.
- **Collaborate with student developers** to connect the UI to the existing system, write clean docs, and demo progress at weekly check-ins.

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### Minimum Qualifications

- **UDRAW-eligible**: You must have a **Federal or State Work-Study award** for Spring 2025 and meet UDRAW participation requirements.
- Coursework or project experience with **Python (FastAPI)**, **HTML**, **JavaScript**, and **CSS**.
- Familiarity with **Git/GitHub** workflows (branching, pull requests) and issue tracking.
- Ability to translate sketches/user stories into accessible, responsive UI.

### Nice-to-Have (Teach-able On the Job)

- **TypeScript** basics and a lightweight UI approach (e.g., **HTMX** and/or **Alpine.js**) to keep the stack simple.
- **Tailwind CSS** or utility-first styling; **shadcn/ui** design patterns for component ergonomics.
- **Storybook** (or a simple pattern library) for documenting components.
- **Playwright** or **Cypress** for UI testing; **pytest** for API smoke tests.
- **Postman/Insomnia** for endpoint exploration; familiarity with **OpenAPI** specs.
- **Sentry** or basic error logging/telemetry; **Plausible** or similar privacy-friendly analytics.

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### Example Deliverables (by the end of the term)

1. A **clickable mock-up** covering core user flows with component annotations (states, validation, empty/error/loading).
2. A **coded UI** for at least 3 core flows integrated with FastAPI endpoints.
3. A lightweight **component library** + **usage documentation** (README, install notes).

4. **Accessibility checklist** + fixes (keyboard navigation, color contrast, labels).
5. A short **UX research summary** (5–8 student interviews or heuristic review) and a **demo** to stakeholders.

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### Tools You'll Use (and we'll support)

- **lovable.dev** for rapid scaffolding/prototyping and generating starter components.
- **Figma or Penpot** for design and clickable prototypes.
- **ChatGPT** for ideation, copy, test cases, refactors, and documentation drafts.
- **GitHub** (issues, projects, pull requests) and **GitHub Actions** for basic CI.
- **FastAPI** + **OpenAPI** docs; **HTMX/Alpine.js** or vanilla JS; **Tailwind CSS** (optional).
- **Swagger** for API testing; **Playwright** for end-to-end tests.

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### How to Apply

Please submit the following in a single email or link bundle:

1. **Resume** + **UD Student ID**.
2. **Two examples**: (a) a design mock-up or case study, and (b) a small web UI you've built (repo or code snippet).
3. A short paragraph on how you would use **lovable.dev** and **ChatGPT** to quickly produce a mock-up and ship a first functional flow in two weeks.
4. Your Spring 2025 weekly availability.

Email subject: **UI/UX Work-Study — Blue Hen Bites — [Your Name]**

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### Eligibility & Compliance Notes

- Must be enrolled at the University of Delaware and **work-study eligible** (Federal or State) for Fall 2025.
- Hiring contingent on UD policy compliance and verification of award.
- The University of Delaware is an **equal opportunity employer** committed to diversity and inclusion. All qualified applicants will receive consideration without regard to race, color, national origin, sex, gender identity, sexual orientation, disability, religion, age, veteran status, or any other characteristic protected by law.

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**Questions?**
Reply to this posting or contact the Academic Coordinator, Matthew Saponaro (mattsap@udel.edu).

## Computer and Information Sciences

### Software Engineer (Workflow Automation System)

**Department/Team:** CIS Academic Coordinator / Workflow Automation Project
**Supervisor:** Matthew Saponaro (mattsap@udel.edu), Computer & Information Sciences
**Location:** Newark, DE (hybrid; on-campus meetings + remote work)
**Dates:** Spring 2025
**Hours:** 8–15 hours/week (flexible around classes)
**Compensation:** $15.00/hour (paid through UD Workforce)

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### About the Project

We're building a lightweight **workflow automation platform** to streamline **administrative tasks** at UD. The idea is to let administrators piece together simple building blocks (forms, decisions, email notifications, file generation) into automated workflows.

Students will help **design and implement a block-based system** that allows tasks to be described in a simple declarative format, and then executed in sequence with error handling, logging, and reporting.

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### What You'll Do

- **Design and build core workflow components** (e.g., form, send-email, submit, errorHandler) and enable them to be chained together.
- **Implement a simple DSL (domain-specific language)** to define workflows in human-readable YAML/JSON or CLI-style config.
- **Build a block execution engine** that interprets definitions and orchestrates tasks in the correct order.
- **Integrate with FastAPI** endpoints for serving workflows, task management, and monitoring.
- **Develop a lightweight front-end** (HTML, CSS, JavaScript) for defining workflows and visualizing them as directed graphs.
- **Support storage and persistence** using MongoDB or Postgres (workflow definitions, execution logs, task state).

- **Leverage AI tools** (e.g., **ChatGPT**) to help generate block templates, error handlers, and test cases.
- **Collaborate with student developers** to connect the platform to real UD administrative workflows (e.g., TA hiring, assignment submissions, email notifications).

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### Minimum Qualifications

- **UDRAW-eligible**: You must have a **Federal or State Work-Study award** for Fall 2025 and meet UDRAW participation requirements.
- Coursework or project experience with **Python (FastAPI)**, **JavaScript**, **HTML**, **CSS**, and databases (**MongoDB or Postgres**).
- Comfort with **Git/GitHub** workflows and collaborative coding.
- Ability to design APIs, schemas, and data flows with clarity.

### Nice-to-Have (Can be Learned On the Job)

- Experience with **workflow engines** (Celery, Airflow, Temporal) or event-driven architectures.
- Knowledge of **graph libraries** (e.g., D3.js, Cytoscape.js) for workflow visualization.
- Familiarity with **TypeScript** for more robust front-end coding.
- Basic **Docker**/containerization skills for packaging workflows.
- Logging/monitoring tools (e.g., **Sentry**, **Prometheus/Grafana**).
- AI-assisted development workflows with **ChatGPT** for scaffolding and code review.

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### Example Deliverables (by the end of the term)

1. **Workflow definition language** (YAML/JSON or CLI-style) with at least 5 supported blocks (form, send-email, submit, errorHandler, decision).
2. **Execution engine** that can process workflows end-to-end with success/error paths.
3. **FastAPI endpoints** for creating, updating, and executing workflows.
4. **Web UI prototype** for visualizing workflows as a graph and allowing block connections.
5. **Documentation + test suite** (unit + integration tests for blocks and execution paths).

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### Tools You'll Use (and we'll support)

- **FastAPI** for serving workflow APIs.
- **MongoDB** or **Postgres** for workflow persistence and logs.
- **JavaScript/HTML/CSS** for the workflow builder and graph visualization.
- **D3.js** or **Cytoscape.js** for directed workflow graphs.
- **ChatGPT** for scaffolding block templates, debugging, and test case generation.

- **GitHub** for source control and collaboration; **GitHub Actions** for CI.
- **Docker** for packaging and reproducibility.

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### How to Apply

Please submit the following in a single email or link bundle:

1. **Resume** + **UD Student ID**.
2. **One code sample** (a GitHub repo, snippet, or project that shows back-end or automation experience).
3. A short paragraph on how you would represent the example TA hiring workflow using a block-based approach.
4. Your Fall 2025 weekly availability.

Email subject: **Software Engineer Work-Study — Workflow Automation — [Your Name]**

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### Eligibility & Compliance Notes

- Must be enrolled at the University of Delaware and **work-study eligible** (Federal or State) for Fall 2025.
- Hiring contingent on UD policy compliance and verification of award.
- The University of Delaware is an **equal opportunity employer** committed to diversity and inclusion. All qualified applicants will receive consideration without regard to race, color, national origin, sex, gender identity, sexual orientation, disability, religion, age, veteran status, or any other characteristic protected by law.

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**Questions?**
Reply to this posting or contact the CIS Academic Coordinator (mattsap@udel.edu