

Bridget Knight

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Creative technologist and emerging technical artist with a strong foundation in software engineering, data pipeline development, and visual communication. Pursuing an MA in Illustration at SCAD while actively expanding into games tooling, procedural systems, and real-time environments. Brings a rare combination of production-level Python and cloud pipeline experience with hands-on illustration and concept art practice; well suited for bridging art and engineering teams.

SKILLS

Technical Art & Tools: Python, Unreal Engine (learning), Blender (learning), JavaScript, HTML/CSS, R, Bash, C++

Art Tools: Clip Studio Paint, Adobe Suite, Toon Boom Harmony

Pipeline & Engineering: Docker, WDL pipelines, cloud workflows (GCP/Terra), Git, Linux, automated reporting systems

Data & Visualization: Pandas, NumPy, Keras, PyTorch, R Shiny, SQL

PROFESSIONAL EXPERIENCE

Software Engineering Intern Jun 2021 - Jul 2025

Broad Institute of MIT and Harvard

Cambridge, MA

- Built automated cloud-based pipeline systems containerized in Linux, managing end-to-end workflow from data ingestion to visual output delivery
- Designed scalable data visualization interfaces in Python and R used by 30+ researchers across international institutions
- Developed modular, reproducible tooling with an emphasis on accessibility and cross-team usability

Research Assistant

Sep 2023 - Jun 2025

Salem State University

Salem, MA

- Built a Python data analysis and visualization pipeline producing outputs used in national conference presentations

EDUCATION

M.A. in Illustration | GPA 4.0

Jan 2026 - Present

Savannah College of Art and Design

Online

B.S. in Computer Science, Intelligent Systems | GPA: 3.94, Summa Cum Laude

Dec 2024

Salem State University

Salem, MA

PUBLICATIONS & PRESENTATIONS

Sproutling: Automating Plant Care with Arduino and Android

Apr 2025

Presented at Massachusetts Undergraduate Research Conference

Amherst, MA

- Arduino/C++ automated plant monitoring system with sensor integration, hardware-software pipeline, and companion Android app for real-time data display

Digging In: Attending to Students' Epistemic Emotions While Computationally Modeling in Physics

Jul 2024

Presented at American Association of Physics Teachers Conference

Boston, MA

- Co-authored research on designing and deploying interactive 2D and 3D computational physics simulations for high school curricula, bridging mathematical modeling with visual and spatial learning tools

Automatic Sequencing Reports

Aug 2024, Jun 2025

Presented at Broad Institute of MIT and Harvard & Harvard Medical School

Cambridge, MA

- Presented automated pipeline tooling for dynamic report generation using Terra and WDL, highlighting modular workflow design and accessibility for non-technical researchers