

# JEFFREY BARDWELL

Software Developer. Scientist.

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## PERSONAL PROJECTS

### **Narrative Game: Five Minute Fantasy**

Modular adventure game proof-of-concept that adapts to player choices using systemic narrative, time, location and encounter mechanics. Built using HTML Canvas, CSS, and JavaScript.

### **Frontend Website: Portfolio Projects**

Dynamic webpage that displays and organizes software project data using a single page application design. Created using custom graphics. Built using HTML, CSS Grid, and JavaScript Mermaid.

### **Application: Bacteria Lot Identification Matrix**

Interactive GUI that identifies unknown isolates using biochemical tests and can display results for known strains. Also factors for sample collection and culture media. Built using Python Tkinter.

## RELEVANT EXPERIENCE

**Research Scientist:** Aptagen, LLC                      Jacobus, PA                      09/2021 – present

NAICS Code 541714: Research and Development in Biotechnology (except Nanobiotechnology)

I created JSON research archival databases and investigated biotechnology AI/ML models. My efforts to streamline client service business workflows allowed us to more efficiently assess grant opportunities, improve bioinformatics data sorting time management, and visualize real-time data.

**Data Scientist:**              White Rabbit Intel, LLC              Durham, NC                      03/2020 – 08/2020

NAICS Code 518210: Data Processing, Hosting, and Related Services

I refactored existing Python 3.6 spaghetti code into concise functions. I developed a modular AWS S3 bucket framework using boto3 and virtualenv libraries. My coding and brainstorming helped reimagine our software-as-service business model and keep the launch date on schedule.

**Proposal Coordinator:** A Square Group, LLC              Frederick, MD                      11/2019 – 05/2020

NAICS Code 541611: Admin. Management and General Management Consulting Services

I researched IT and healthcare small business federal contract opportunities. I edited Agile proposals and white papers, acted as a stakeholder communications hub, and organized project Gantt charts. My contributions helped our company submit five proposals and land one contract.

**Web Developer:**              Twigboat Press, LLC                      Brookneal, VA                      05/2017 – 11/2019

NAICS Code 511130: Book Publishers

I used GIMP 2.8 to make website and promotional graphics. I coded R 2.15 scripts to correlate ebook sales. I created a JavaScript Program to autogenerate newsletter content and set up a Sendy ESP to post newsletters via AWS SES. These efforts resulted in a marked sales uptick.

**Lecturer:**                      Longwood University                      Farmville, VA                      08/2013 – 05/2016

NAICS Code 611310: Colleges, Universities, and Professional Schools

I designed and taught an R-centric course to undergraduate STEM majors demonstrating experimental design, data sorting, model testing, and results presentation using dplyr, ggplot2, magrittr, and tidyr. This boosted student coding literacy, problem solving, and critical thinking.