William E Stiller

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Education

Penn State Erie, The Behrend College	**December 2023**
Bachelor of Arts in Digital Media, Arts, and Technology	(GPA 3.53)
Minor in Data Visualization, Certificate in Human Factors	
National Society of Leadership and Success Member	Spring 2021 – Current
Pathway to Success: Summer Start Program	Summer 2019
Northern Virginia Community College	**August 2025 – Present**

Work Experience

Data Structures Fellow — Gaithersburg, MD
National Institute of Standards and Technology — May 2023 – Aug 2023

- Evaluated **data storage and curation solutions to support analysis** of product quality in manufacturing systems
- Assembled abstract data structures and algorithms in an iterative process to convert raw XML manufacturing data into an HDF5 file structure
- Collaborated with PhD researchers to present findings and advancements, culminating in a detailed conference presentation

Teaching Assistant — Erie, PA
Penn State Erie, The Behrend College — June 2022 – June 2022

- Supported instruction of a collaborative XSLT and XML programming course to PhD project teams
- Discussed further **text archiving strategies and systematic encoding via XSLT** algorithms
- Presented daily course samples and example materials for project teams

Web Developer — Erie, PA
Penn State Erie, The Behrend College — May 2022 – Dec 2022

- **Lead designer of the 2022 project page redesign** for the Digital Media, Arts, and Technology site
- Updated web content, media formats, and programmed in JavaScript to showcase student projects
- Developed mobile compatibility and responsive design for the DIGIT program's student-run website

Conference Presentations

Stiller, William. "Hierarchical Data Structure Development to Support Digital Thread and Digital Twin Applications." NIST Colloquium Series, August 2023, Gaithersburg, MD. Conference Presentation.

Project Experience

Stardew Valley Text Analysis   Spring 2023

- **Implemented Python script to perform in-depth text analysis** of the game *Stardew Valley* with a team of two, showcasing findings via GitHub Pages
- Automated the cleanup and curation of raw YAML files with use of Python, XPath, and XQuery algorithms, achieving milestone goals within the first week of the 6-week project
- **Led data curation efforts by cleaning, parsing, and preparing XML text data** for topic-modeling and other analysis, ensuring accuracy and completeness with prepared schema

League of Legends Character Performance Analysis   Fall 2022

- Individually compiled in-game character statistics and tournament data in R to form a foundational character scoring system
- Conducted **predictive analysis of tournament performance in R**, incorporating changes from available public beta-access tests
- Validated scoring models by comparing predictions against collegiate tournament outcomes

Founding of Penn State Behrend Website   Fall 2022

- Collaborated with an interdisciplinary team to develop, test, and deploy the markup of historical documents using Git, XML, XPath, and XSLT
- **Integrated data standards via RNC schema** to improve archive consistency and provide a foundation for future documents
- Annotated humanities texts using markup to capture relationships between people, organizations, dates, and document mediums

Honors and Awards Received

Dean's List	Fall 2021, Spring 2022, Spring 2023, Fall 2023
Part-time Dean's List	Summer 2023
Patricia S. Yahn Art Show, Chancellors Award	Fall 2021

Society Memberships

National Society of Leadership and Success	Spring 2021 – Current

Extracurricular Activities

PSU Behrend Lion Ambassador	Spring 2023, Fall 2023
Behrend eSports Team Captain	Spring 2023, Fall 2023
Behrend Gaming Club Member	