**James O’Brien**

(570)-713-7084

jamesseanobrien@gmail.com

# Experience & Projects

**Backend Software Engineer |** Xactly, Remote **February 2023 – August 2024**

* Handled customer support tickets related to issues with Incent software, effectively diagnosing and resolving problems to enhance user experience.
* Investigated miscalculations by analyzing user data logs, identifying errors, and providing customers with detailed instructions to rectify issues independently.
* Reproduced and diagnosed software malfunctions caused by edge cases, utilizing error logs and code reviews to implement solutions and communicate findings to customers.
* Developed and executed SQL queries for bulk data deletions and extractions, ensuring data integrity through careful backup processes and prompt delivery of requested information.
* Collaborated with support and DBA teams to assess and resolve software performance issues, implementing upgraded database plans to improve data access speed for high-volume customers.
* Created extraction scripts in Java to automate data retrieval processes, and monitoring service status, integrating them into a web-based debugging tool for easy access by team members and customers.
* Maintained comprehensive records of ticket resolutions, including issue identification, troubleshooting steps, and outcomes, contributing to a shared database for team reference and future troubleshooting.

**Programmer Analyst |** PennState Health, Hershey, PA **September 2021 – February 2023**

* Contributed to the development of a web-based lab management platform using Django and Angular, implementing back-end functionality for lab creation and research data tracking, and ensuring code quality through unit tests and code reviews.
* Managed task prioritization and delivery timelines, collaborating with cross-functional teams to complete tickets within 1-7 day turnarounds, ensuring smooth development and timely project progress.
* Led the migration of a 15-year-old Oracle database to a custom-built research database, reverse-engineering its structure and developing Python scripts to transfer 1TB of data while ensuring integrity through error handling and interruption recovery.

Delivered the migration solution within 6 months, safeguarding a six-figure research grant and ensuring compliance with long-term data retention requirements, all while balancing other development tasks.

* Designed and implemented Python scripts to process 4TB of lost DNA data on HPC clusters using SLURM, reducing data regeneration time from months to hours through automation with error correction and logging.

Completed the project in 2 months as the sole developer, delivering an efficient tool that streamlined DNA data transformation for visualization and analysis, benefiting the research department’s workflow.

**Technical Support/General IT |** Bucknell University, Lewisburg, PA **2016-2019**

* Collaborated with a team of 5 to deliver on-site IT support, including hardware installation and software troubleshooting.
* Led efforts to coordinate and deploy department wide computer upgrades across organization.
* Assisted in imaging and installing customized Windows OS on each organizational computer.

**Node.js Discord Bot |** Personal Project **Since 2019**

* Developed a Discord bot using Node.js and MySQL to identify shared games among friends for multiplayer sessions.
* Integrated Steam’s API to access and compile data on friends’ game libraries, creating a list of common games.
* Stored game library data in a MySQL database to reduce API calls and improve response time.
* Later this functionality was implemented directly into the game distribution service we all use.

**Computer Science Tutor** at **Elizabethtown College** **|** Elizabethtown, PA **August 2018 – May 2020**

* Selected by Dr. Leap, Chair of the Computer Science Department, to assist students in CS I, CS II, Data Structures, and Systems Programming based on subject expertise.
* Delivered personalized instruction to enhance one-on-one student learning experiences.

# Education

**Elizabethtown College** | Bachelor of Science | Elizabethtown, Pa 3.68 GPA | 2020

* Major: B.S. Computer Science

# Skills & Abilities

**Languages:** Java, C#, Python, MySQL, SQL, JS, node.js, TS, rest api, React, Angular, html/css, Bash, C++

**Platforms:** Mac, Linux, Windows, Linux server environments, Git, Github, Gitlab, Agile, Object Oriented Programming, Unit Testing, Software Engineering methodologies

**Links:** <https://www.linkedin.com/in/jimobr/> <https://github.com/JimmyTheRustler>