Jordan Mitacek

631-926-0033 | jordan.mitacek@gmail.com | linkedin.com/in/jordanmitacek | github.com/JMit-dev

Education

Stony Brook University — Stony Brook, NY
B.S. Computer Science — *May 2026*

Suffolk County Community College — Selden, NY
A.S. Computer Science — *May 2024*

Experience

SULI Research Intern — June 2025 – Aug. 2025
Brookhaven National Laboratory — *Upton, NY*

- Built a JavaFX client integrating Bluesky Queue Server into Phoebus, enabling real-time plan management for beamline scientists without leaving the Phoebus environment
- Designed high-performance REST service layer with rate limiting and retry logic, streaming live console output with sub-second latency
- Achieved 100% request success rate in benchmark testing with mean response time of 18.6 ms
- Deployed as standalone Phoebus application, reducing operator context switching and streamlining experimental workflows
- Presented project poster to 300+ attendees at BNL's summer intern symposium

CCI Research Intern — Aug. 2024 – Dec. 2024
Brookhaven National Laboratory — *Upton, NY*

- Designed and implemented custom interpreter for Deposition Laboratory's control system, enabling EPICS-compatible scripting to streamline experiment automation
- Developed Python bindings for interfacing with EPICS IOCs, enhancing system flexibility
- Engineered Qt-based GUI for chamber status monitoring and user control, improving accessibility for researchers
- Developed remote script execution using Bluesky QueueServer, allowing researchers to submit and execute experiment scripts remotely with asynchronous job scheduling
- Presented project poster at BNL's fall symposium

Projects

Playlister | *React, Node.js, Express.js, MongoDB, MySQL, JavaScript, Tailwind* — Sept. 2025 – Present

- Developed full-stack CRUD web application for creating and managing music playlists with YouTube API integration
- Implemented user authentication system with secure account management and session handling
- Built RESTful API with both NoSQL (MongoDB) and relational (MySQL) database backends for playlist storage
- Designed responsive UI using React and Tailwind CSS with features for playlist sharing, commenting, and song statistics
- Integrated undo/redo system and local storage for enhanced user experience

MyrientDL | *Python, SQLite, asyncio, httpx, Rich CLI* — Sept. 2025 – Present

- Built asynchronous web crawler and download manager for game archival with resumable download support
- Implemented fuzzy search algorithm with game name normalization, achieving 60+ match score threshold
- Designed SQLite database schema with indexed queries for efficient game catalog searching across 10,000+ entries
- Engineered rate limiting using token bucket algorithm and per-host semaphores to respect server resources
- Created interactive CLI with Rich library featuring progress bars, concurrent download tracking, and filtering options

Technical Skills

Languages: Java, Python, JavaScript, C/C++, GLSL, Assembly (MIPS, x86), Bash, Lua
Frameworks & Libraries: JavaFX, JUnit, Bluesky, Ophyd, Bluesky QueueServer, pytest, React, Node.js, Express.js, MongoDB, REST APIs, WebSockets, ZeroMQ
Developer Tools: Git, IntelliJ Profiler, JavaDocs, SceneBuilder, Maven, Gradle
Systems & Technologies: EPICS, Phoebus, Linux/Unix, Multithreading, Networking (HTTP, REST, Pub/Sub), LaTeX