Maximus Beato

516-355-1987 | mbeato@purdue.edu | linkedin.com/in/maximus-beato/ | github.com/mbeato/ | mbeato.dev/

Education

Purdue University — West Lafayette, IN
Bachelor of Science in Computer Science — *Expected May 2026*
Concentrations: Software Engineering; Machine Intelligence

Regis High School — New York, NY
Diploma — *Aug 2018 – May 2022*

Experience

Software Engineering Intern — May 2025 – Present
VertikalX — *West Lafayette, IN — Remote*

- Migrated in-house auth to **AWS Cognito** with **Google IdP** via **NextAuth**, achieving zero downtime
- Built **AWS Lambda** services (Node.js/TS) using **AWS Encryption SDK (KMS keyring)** for code decryption and **SendGrid** for localized templated email delivery with validation
- Integrated **Stripe** APIs/webhooks for mobile onboarding and **501(c)(3)**-compliant receipts; implemented related **React/Next.js** flows
- Enhanced UX and created new flows in **Next.js/NestJS**; implemented **GraphQL** resolvers and added **unit/integration tests** in CI/CD

Frontend Engineer — Apr 2024 – Aug 2024
DocReserve — Early-stage startup — *Boston, MA — Remote*

- Built and refactored reusable UI components with **React**, **TypeScript**, and **MUI** to standardize the interface
- Improved the calendar experience (navigation, readability, empty/loading states) using **TypeScript** and **Prisma**
- Developed in a **Docker**-based environment for consistent builds and straightforward local setup

Undergraduate Data Science Researcher — Aug 2022 – May 2023
The Data Mine, Purdue University — *West Lafayette, IN*

- Analyzed social services datasets using **R** and **SQL** to surface trends and validate data pulls
- Cleaned, joined, and documented large datasets in **Azure Data Studio** to produce reliable, reusable tables
- Built **Tableau** dashboards and presented findings to Indiana FSSA stakeholders and at The Data Mine Symposium

Projects

BoilerBoard | *Python, Django REST Framework, React* — Feb 2024 – May 2024

- Designed and built a centralized platform for Purdue students to support course Q&A, discussions, and resource sharing
- Implemented RESTful APIs with **Django REST Framework** (models/serializers/views) to manage threads, comments, and categories
- Developed a responsive **React** frontend with reusable components and routing; integrated API calls and form validation
- Improved usability with clearer information hierarchy and accessibility-friendly patterns across key pages

Shell — Custom Unix Shell Interpreter | *C, C++, POSIX* — Feb 2024 – Mar 2024

- Implemented a Unix-style shell supporting pipelines, I/O redirection, command sequencing, and foreground/background execution
- Built a tokenizer and parser for quoting, escaping, and environment variable expansion; executed commands via `fork`/`execvp` and `waitpid`
- Added job control and signal handling (`SIGINT`/`SIGTSTP`/`SIGCHLD`) with process groups and terminal control
- Ensured memory safety and performance with RAII/C++ containers and Valgrind checks; implemented built-ins (`cd`, `pwd`, `exit`, `export`)

Technical Skills

Languages: TypeScript, JavaScript, Python, C/C++, SQL (PostgreSQL), R
Frameworks: React, Next.js, NestJS, Django REST Framework, Node.js, GraphQL
Cloud/Services: AWS (Cognito, Lambda, KMS, Encryption SDK), Stripe, SendGrid
Tools/DB: Prisma, PostgreSQL, Docker, Git, CI/CD, Azure Data Studio, Tableau, Valgrind