

Christopher Baillie Olin

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https://olincb.me | https://github.com/olincb
Bellingham, WA

Education

University of Maryland

B.S. Computer Science, Magna Cum Laude

B.S. Mechanical Engineering, Magna Cum Laude

College Park, MD

GPA: 3.98

Dec. 2022

Skills

Languages: Python, JavaScript/TypeScript, Rust, SQL, Java, Ruby, C, C++, OCaml, Racket, WebAssembly, x86

Technologies: MongoDB, Snowflake, GitLab CI, Terraform, Docker, Kubernetes, AWS, Dask, Flask, NodeJS

Experience

Kroll Bond Rating Agency, Generative AI Content Creation Team

New York City, NY

Senior Software Engineer

July 2025 - present

- Designed and developed a full-stack generative AI content creation platform, owning backend services and APIs built on OpenAI and LlamaIndex, cutting analysts' first-draft writing time by over 50%
- Played a key role in shaping company-wide authentication and authorization strategy alongside security engineers and technical leadership, and designed platform- and service-level Auth0 integrations
- Contributed to the design and implementation of an extensible, event-driven system that dynamically provisions isolated, per-client infrastructure stacks for multiple applications in response to Salesforce contract state changes
- Built and maintained shared libraries and developer tooling used across 10+ engineering teams, improving platform maintainability and reinforcing engineering best practices
- Conducted technical interviews and mentored engineers, helping shape engineering hiring standards

Kroll Bond Rating Agency, RMBS Team & Generative AI Content Creation Team

New York City, NY

Software Engineer

June 2023 - July 2025

- Led a high-velocity engineering team delivering reliable, scalable, and auditable access to core statistical models
- Designed and implemented a microservice-based backend for statistical model execution that supports high-concurrency workloads via Dask and serverless AWS infrastructure, processing up to ~1M records and reducing end-to-end runtime from hours to minutes while optimizing cost
- Maintained CI/CD pipelines and infrastructure-as-code using GitLab CI, Terraform, Docker, and Helm

Kroll Bond Rating Agency, Data Engineering

New York City, NY

Software Engineering Intern

June - Aug. 2022

- Extended a Flask-based API code generator to add authentication with Auth0 to generated APIs
- Migrated numerous legacy APIs to a dynamically generated architecture, eliminating boilerplate and enabling centralized updates across services, saving hours of manual engineering effort

Amazon, Prime Video Live Monitoring

Seattle, WA

Software Engineering Intern

June - Aug. 2021

- Developed an autoscaling video defect detection service on AWS and integrated it into a production pipeline
- Validated the system in production by identifying real video defects affecting thousands of customers

Army Research Lab, E/H-Field Sensing Team

Adelphi, MD

Software Engineering Intern

June - Aug. 2020

- Implemented a secure wide-area network to connect a distributed fleet of Internet of Things power sensors
- Designed a secure NodeJS-based web portal for accessing sensor configurations and data

Projects

Line-of-Sight Viewshed GIS Tool (olincb.me/projects/line-of-sight)

Rust, GDAL

- Built a Rust GIS tool that generates viewshed maps from USGS 3DEP elevation data and 7.5-minute topographic maps, using GDAL for raster access, coordinate transforms, and GeoPDF rendering
- Optimized geospatial processing pipeline with Rayon parallelism and disk caching of DEM and topographic data, reducing uncached map generation from several minutes to ~20-25s, with faster responses for cached areas

Wacket Programming Language

Racket, WebAssembly, JavaScript

- Co-created Wacket, a Lisp-inspired programming language with a compiler targeting WebAssembly, implementing the lexer, parser, compiler, and abstract syntax tree in Racket, and a runtime system in JavaScript
- Source code and write-up: <https://github.com/stefanhts/wacket>