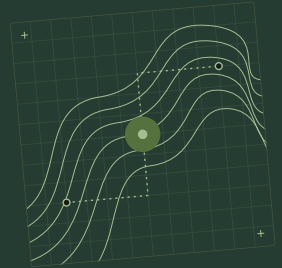


Jordan Brack

Software Engineer

Denver, Colorado | jbrack14@gmail.com | 304.546.6987

JordanBrack.com | [LinkedIn](#) | [GitHub](#) | [2b2t Atlas](#)



Software engineer who translates mining and geoscience processes, data, and systems into usable software. I build geospatial applications, AI workflows, and integrations, from understanding the domain through implementation and ongoing operation.

Technical skills

C#, .NET, ASP.NET Core, Blazor, Python, C++, JavaScript, SQL
ArcGIS, spatial data, ETL, REST APIs, Microsoft Agent Framework, RAG, MCP
SQL Server, PostgreSQL, SQLite, ONNX Runtime, Docker, Git, PowerShell

Professional experience

Software Engineer, Application Development | Newmont Corporation

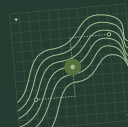
April 2019 - Present | Denver, Colorado | Contractor through 2021; full-time since 2021

- Translate exploration, land, drilling, survey, and laboratory workflows into applications, data contracts, validation rules, and practical user interfaces.
- Develop GeoGen and shared Blazor maps, charts, search, and document components with authentication, role-based access, and reusable page state.
- Integrate SQL, REST, and ArcGIS sources. Build land-data pipelines with reprojection, validation, deduplication, and staged publication.
- Develop GeoAI systems for spatial analysis and document research using C# agent workflows, MCP, and hybrid retrieval. Ground answers in source references, enforce data scope and permissions, and evaluate tool behavior. The current workflow runs locally.
- Develop ArcGIS Pro drill-trace tools and survey validation workflows. Maintain C++ core-logging software and modernize Python infill-drilling tools.
- Maintain laboratory automation, sample tracking, and LIMS integrations. Contribute to C#/.NET modernization with Blazor operator interfaces and shared runtime contracts; hardware integration remains in development.
- Automate Survey123 reporting, sensor-data ingestion, and Site Scan imagery integration. Support testing, deployment, troubleshooting, and documentation.

Web Developer | Freelance

June 2017 - Present | Alongside full-time employment

Design, build, and maintain websites for consulting practices, small businesses, and public planning projects. Delivered sites for Haas & Lovejoy, Lovejoy Consulting, and the Pathways National Heritage Area feasibility study. Work spans requirements, design, implementation, hosting, and support.



Selected projects

2b2t Atlas

Build and operate a mapping and digital preservation platform for the 2b2t Minecraft community. Connect preserved worlds and historical records with interactive 2D/3D views and saved-object search. Serves around 80,000 unique users and handles over 45 million requests per month.

- Develop preservation pipelines for a source archive scope of 16+ TB, including the 1M world archive. Process 13.3 billion historical block and chunk observations into map products; maintain 41+ million searchable index records.
- Provide REST/OpenAPI, downloadable catalogs, and a public read-only MCP interface. Integrate community archives and released historical data with attribution and provenance.

2b2tatlas.com | [Public API and examples](#)

BlackBrain and BlackBox

Build a local AI assistant in ASP.NET Core and Blazor with hybrid retrieval, persistent tasks, streaming responses, and reviewed tool execution. Use diff previews, scoped approvals, and audit trails for changes. Operate the supporting Docker and Windows services, local inference, monitoring, verified backups, and recovery workflows.

Memoria

Build a web interface for posts, replies, and profiles stored on Bitcoin Cash, combining direct node integration, protocol decoding, and live updates.

memoria.cash

Earlier experience

Software Engineer | syGlass, Inc

March 2015 - May 2017 | Morgantown, West Virginia

Worked with software engineers and neuroscientists on a VR platform for scientific and medical imaging. Developed rendering, interface, and data-processing components with C++, OpenGL, Python, JavaScript, AngularJS, and Electron. Contributed to the transition from university research to a commercial product.

Undergraduate Research Assistant | West Virginia University

November 2014 - May 2017 | Morgantown, West Virginia

Researched computer vision and scientific visualization with the Vision and Learning Group and Spirou Lab. Developed high-resolution visualization methods for neuronal tissue and connectomic network data.

Education

West Virginia University

Bachelor of Science in Computer Science | May 2017