

Website: <https://lewibs.com>
Github: <https://github.com/lewibs>

Benjamin Lewis
Phone: +1(919) 909-8267

Email: benjaminsl2000@gmail.com
Linkedin: <https://linkedin.com/in/lewibs>

Work Experience

-
- | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------|
| Software Engineer | SMART Technologies | Aug 2024 - Present |
| <ul style="list-style-type: none">• Won the True North award by implementing right to left text support, which opened up a sales market which accounts for 10% of the global population.• Took the lead in implementing a feature called "link anything." Convinced management and stakeholders to support it, and worked around the clock to ensure start to end completion of a highly desired user facing feature.• Integrated the needed math in the 2D graphics engine to support rotated text. | | |
| Founder/Fullstack Software Engineer | Envision Reality | May 2023 - Aug 2024 |
| <ul style="list-style-type: none">• Envision Reality is a 3D user facing AI-assisted photorealistic interior design web-application.• Created a 3D visualization engine that utilizes recent Gaussian Splatting research for AR/VR.• Created Lambda workers for integrations into long running third party APIs.• Created WASM C scripts to implement faster graph traversal algorithms in the front end.• Invented deep learning point cloud gaussian segmentation algorithms. | | |
| Front End Software Engineer | PowerN | Dec 2021 - Dec 2023 |
| <ul style="list-style-type: none">• Lead developer for building the SaaS web-app and overseeing its end to end development for a comfortable user experience.• Architect for CPMS, a three.js based 4D computer vision engine for nuclear power plants.• Converted wireframe designs into scalable well documented code and clean architecture.• Designed scalable Django Python backend APIs and optimized front-end data flows.• Implemented microservice for point-based compatibility checks for prefabricated components.• Lead an collaborative agile team of international developers and cross discipline engineers. | | |

Technical Skills

-
- Languages: Javascript, TypeScript, Java, Python, C, MATLAB, HTML/CSS, Golang
 - Frameworks: Pytorch, Three.js, Nest.js, Next.js, React, ReactNative, Potree, ifc.js, Flask
 - Tools: Linux, Docker, AWS, JWT, Mongo, Jest, WebAssembly (WASM), AWS-CDK, LIDAR, SQL

Education

North Carolina State University	Raleigh, North Carolina
B.S. Computer Science	GPA 3.5

Projects

-
- Ottery** <https://github.com/ottery-app>
- Childcare security system which awarded me the Computer science honors award.
 - Designed and created a system for safely picking up and dropping off kids at daycares.
- DuckTyper** <https://www.npmjs.com/package/ducktyper>
- Ducktyper is a runtime DTO validation tool to help with complexity involved with Forms and APIs.
 - Created so that developers can create templates, then use those to validate input automatically.
- Open Source Contributions**
- **Threejs** - DragControls, added rotate mode - <https://github.com/mrdoob/three.js/pull/27689>
 - **IFCjs** - Raycaster improvements - https://github.com/ThatOpen/engine_components
 - **Lumaapi** - Updated to work with aws lambda <https://github.com/envisionreality/lumaapi-python>