



I am a **Lead Software Engineer** with 15+ years of experience in industrial engineering, software development, and Web3 architecture. As a generalist who is quick to ramp up, my goal is to make your product fast, friendly, reliable and secure.

Portfolio

atcweb3.com/

LinkedIn: [in https://www.linkedin.com/in/andrew-thomas-carl/](https://www.linkedin.com/in/andrew-thomas-carl/)

Email: AndrewThomasCarl@outlook.com

Location: Greater Harrisburg Area, PA, United States

Phone: 443-929-9526

Experience



Launched Funtoken Website.

Chief Technology Officer

FBCoins (Funtoken) | April 2024 – August 2024

FUNToken is the one-stop gaming token. Top 600 on CMC

Auditing: As CTO, I ensured there were no security vulnerabilities in the codebase. I assessed rollback impact of the FUN bridge and conducted in-depth analysis of FUN holders.

Rebuilding: A rebrand required a new team. After 64 candidate reviews and 15 interviews, I hired two expert full-stacks with complementary skills.

Website: To meet a tight website launch date, I ramped up on NextJS in a matter of days, adding animations, refining the UX, adding the dynamic blog API, as well as automating WebP image conversions and sitemap generation.

GameHub: This was my idea to rebrand FUN. Leveraging one of the hottest web3 trends and its built-in communities, a hub is easier to build and acquire users than building games. I designed the framework, tech-stack, UX wireframes, and the numerous ways to monetize without alienating users.



FunHub Figma Designs

Blockchain Audits: I also conducted two internal blockchain investigations to trace stolen funds. I was able to trace funds across bridges and mixed-wallet trails to dozens of transactions to KYC enabled exchanges.

Contact: Khalid Ibrahim (CBDO) - email: Kmamoun@gmail.com



Certificate
**Kentico Xperience 13
Certified Developer.**

This is to certify that
Andrew Carl

Certified in 2.5 Weeks.

Web Developer Lead

BlueModus | September 2023 – April 2024

BlueModus is an agency that supports website development for CMS marketing sites.

Kentico: Without prior knowledge of CMS systems, I was able to get certified in Kentico Xperience 13 in the first 2.5 weeks on the job.

Search: I optimized an API sync between Netforum and Kentico, reducing update time from hours to minutes. Also worked with Azure Cognitive Search.

Email Marketing: Built dynamic email templates from scratch, using MJML as a base, applying complex Kentico macros for personalization, setting up subscriptions, and testing formatting in dozens of clients using Email on Acid.

Contact: Joel Anderson (Director) - janderson@bluemodus.com

Skills - Expert



Analytics: Research & dev tests (Evapco). Blockchain audits (Glitter, Funtoken). Contracts (Doxxlocker)



Bridges: Built Algo-Sol bridge, USDC bridge on ETH, Poly, Algo, Sol, Tron, Avax, Arb, Op & ZkEVM. (Glitter)



C#: Thermal software (Evapco). Game development (Re3Studios). Client websites (BlueModus)



JSON: Dynamically generated content (Re3 Studios), blogs (Glitter), and bridge data (Glitter)



Reporting: Technical publications (Evapco) [1] [2]. Safemoon blockchain analysis. (Doxxlocker) [3].



Unity: Extensive engine work on procedurally generated voxel game, Satus (Re3 Studios)



VB.NET: Extensive work on thermal software (Evapco)

Skills - Proficient



APIs: Bridge explorer API (Glitter). Blogs API (Funtoken)



Architecture: Lending-Borrowing & Bridges (Glitter). GameHub (Funtoken)



Blockchain: RPC & API connections with Algo, Sol, Tron, EVMs, Layer 2s.



Cloudflare: Multiple websites, DNS, pages. (Glitter, Funtoken)



Digital Ocean: Deploying 8 droplets (Glitter). 1 Droplet, 2 Apps (Funtoken)



Email Marketing: Email templates for multiple clients (BlueModus)

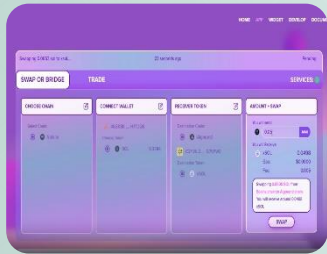


ESLint: Added to all new JS/TS projects (Glitter, Funtoken)



Express: API server for Glitter Bridge

Experience (Cont.)



Glitter Blockchain Bridge.

Principal Software Engineer

Glitter Finance | May 2022 – August 2023

Glitter is a blockchain bridge for the everyday user.

Building Dev Team: To grow the team, I reviewed over 220 candidates and conducted more than 60 interviews to fill ten developer positions. Fine-tuned hiring process with incrementing success.

Token Bridges: I wrote and deployed TEAL contracts for Algorand-Solana bridge. I managed development of a USDC bridge to 8 blockchains and oversaw all frontend work. An EVM token bridge was also partially deployed.

SDK and API: I was the primary developer of the SDK for third party integrations, publishing packages to NPM. This SDK was also used in our internal code and API. Under the API was a node poller monitoring 10 blockchains in real-time.

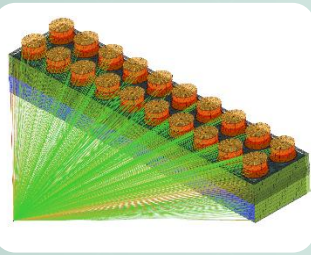
Bridge Explorer: Every bridge transaction was visible on our explorer. This aggregated the data of all 3 Glitter bridges, as well as providing live metrics.

Luster Protocol: Luster protocol was a lending-borrowing platform that I co-designed but did not get funded. Luster maximized utilization for higher yields and implemented payment installments for lower borrowing interest. Advanced tokenomics modeling ensured stable token pricing.

Contact: Khalid Ibrahim (COO) - email: Kmamoun@gmail.com



Glitter Bridge Explorer.



Custom Sound Modeling.

Thermal Software Engineer

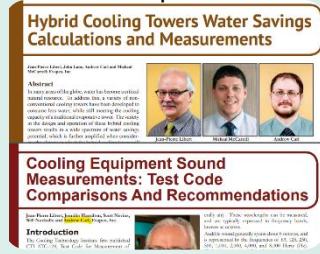
Evapco-EvapTech | December 2008 – March 2021

EVAPCO, Inc. is an industry-leading manufacturing company for worldwide heat transfer applications.

Thermal Software: I upgraded the code from VBA to .Net WPF, deploying to Azure using MSSQL and Azure functions. This includes graphs, macros, and fully guaranteed results.

Acoustic Software: I created robust sound prediction tools that uses in-depth modeling to break down sound paths into locales, applies dampening, absorption, and atmospheric conditions, and aggregates the resulting effects. This can dynamically show a 3D rendering of cooling tower sound paths.

Thermal Expertise: Over 12 years, I helped design and test component improvements and test chambers, analyzing endless datasets to add to the thermal program. I authored a 90-page Master Guidelines covering all aspects of cooling tower and component design. I also co-authored two papers published by the Cooling Tower Institute.



Co-Author of 2 Publications.

Contact: Mark Huber (Director) - email: mhuber@evapco.com | 410-756-2600

Skills - Proficient (cont.)

- GitHub:** 3 repos (Re3 Studios), 15 repos (Glitter), 10 active repos (Funtoken)
- Hiring:** Hired 10 positions (Glitter), Hired 2 positions (Funtoken)
- JavaScript:** Server and front-end (Glitter), websites (Funtoken)
- Kentico:** Multiple client website builds (Bluemodus)
- Management:** 5 devs & 4 projects (Glitter), 2 devs & 2 projects (Funtoken)
- MS SQL:** Project & user data storage (Evapco)
- Node.js:** Algo-Sol & USDC bridge (Glitter), RPC poller (Glitter)
- RPCs:** Quicknode/Ankr & Etherscan API & CMC, Coingecko prices (Glitter)
- Smart Contracts:** Automated security analysis of 100,000 BNB contracts
- TypeScript:** SDK (Glitter), Websites (Funtoken, Glitter, [my portfolio](#))

Skills - Experienced

- Algorand
- ASP.NET
- Azure
- Confluence
- CSS3
- Gimp
- HTML5
- Inkscape
- Jest
- Jira
- Next.js
- npm
- PostgreSQL
- Postman
- Python
- React
- Rust
- Solidity
- Swagger
- TailwindCSS
- Websocket
- Winforms
- WordPress
- WPF

Skills - Limited

- AWS
- Django
- Docker
- Elasticsearch
- MongoDB
- Nginx
- Sitecore