

William (Brian) Richmond

Software Engineer | Systems Architecture | Secure Desktop Applications | Analytics

Apopka, FL | w.richmond@wbr.it.com | 407-259-8105 | wbr.it.com | github.com/wrich51697 | [LinkedIn](#)

SUMMARY

Software engineer and founder focused on systems architecture, secure application design, analytics, and research-driven development. Currently building **BitLedger**, a desktop financial management application emphasizing secure workflows, usability, and long-term maintainability, while leading ongoing research initiatives through BitGrid Technologies, LLC.

Brings technical education, hands-on software development, operational leadership, and real-world problem-solving developed through decades of transportation and logistics operations. Currently completing an MBA in Business Analytics after earning graduate and undergraduate degrees in software engineering and software development.

Strong interests include systems architecture, AI-assisted development workflows, infrastructure reliability, analytics, and next-generation computing research.

TECHNICAL SKILLS

Languages: Python, Java, SQL, JavaScript, HTML/CSS, R, C/C++

Frameworks & Technologies: PySide6/Qt, SQLite, REST/API concepts, OOP, desktop application architecture

Web & UI: HTML/CSS, JavaScript, responsive layout concepts, UI/UX-focused design workflows

Engineering: Systems architecture, software design, requirements analysis, data modeling, Agile/hybrid delivery, risk analysis, validation planning, scope management

Analytics & Data: Power BI, R, business analytics, data visualization, predictive analytics concepts, reporting workflows

Infrastructure: Git/GitHub, Linux, Windows, JetBrains IDEs, VPN technologies, pfSense, Tailscale, remote systems administration

Security: Secure design principles, authentication/authorization concepts, encryption fundamentals, threat-aware architecture

TECHNICAL PROJECTS

BitLedger Desktop financial management application focused on privacy-first design, secure workflows, and modern usability.	Technologies Python, PySide6, JavaScript, HTML/CSS, SQLite	Highlights Modular architecture; dynamic theming; authentication-protected financial details; offline-first workflows; dashboards and reporting; secure local data management.
BitGrid Research Platform Research initiative exploring integrated approaches to hardware architecture, operating systems, intelligence systems, and security alignment.	Focus Areas Constraint-driven systems design; distributed architecture concepts; AI-assisted operating environments	Research Lens Security-oriented computing models; long-term scalability and performance analysis.
Web Design & Technical Portfolio Development Designed and deployed personal and company websites for technical communication and project visibility.	Sites wbr.it.com bitgridiq.com	Focus Responsive design; front-end layout and styling; technical content presentation; branding and usability.
Data Analytics & Visualization Projects Developed analytics, predictive modeling, and visualization projects using Power BI, R, SQL, and statistical analysis.	Methods Predictive analytics; decision trees; market basket analysis	Outputs Data storytelling; operational analytics; business intelligence dashboards.

EXPERIENCE

Founder & Researcher - BitGrid Technologies LLC - 2019-Present

- Designed and developed BitLedger using Python, PySide6, JavaScript, HTML/CSS, and SQLite.
- Implemented modular UI workflows, authentication-protected financial views, and offline-first desktop functionality.
- Developed and deployed technical portfolio and company websites supporting product presentation, research communication, and professional branding.
- Produced technical architecture documentation, system planning artifacts, and research specifications.
- Conducted ongoing research into systems architecture, distributed computing concepts, and AI-assisted workflows.
- Applied Agile and hybrid project management methodologies to iterative feature development and roadmap planning.
- Self-funded research and development efforts while maintaining full-time operational employment.

Commercial Transportation & Operations - Owner-Operator / Company Driver - 1998-Present

Built extensive operational, logistical, and customer-service experience through commercial transportation work involving independent business operations, regulatory compliance, time-sensitive delivery coordination, and real-time decision-making.

- Owner-Operator, 1998-2016; Company Driver, 2016-Present.
- Operated under DOT safety regulations and strict delivery schedules across long-haul transportation environments.
- Managed routing, operational planning, scheduling, and customer coordination in high-responsibility environments.
- Developed strong discipline in risk assessment, problem-solving, and execution under time-sensitive conditions.
- Built practical experience in operational efficiency, logistics coordination, and stakeholder accountability.
- Maintained consistent reliability and professional service across changing operational and economic conditions.

EDUCATION

M.B.A., Business Analytics	Champlain College Online	In Progress
M.S., Software Engineering & Project Management	Champlain College Online	Completed
B.S., Software Development	Champlain College Online	Completed