

## EDUCATION

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Cameron University (B.S, Magna Cum Laude, Computer Science)	Fall 2010 – July 2014
Cameron University (A.S, Magna Cum Laude, Information Technology)	Fall 2012 – June 2014

## KEY TECHNICAL SKILLS

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- Distributed systems engineering with Erlang/OTP and Elixir (Phoenix, LiveView, Ash Framework) for high-throughput, fault-tolerant backend services.
- High-volume event ingestion and time-series data modeling (1.5M+ events/day; peak ~250 events/sec).
- Designing and documenting REST APIs; integrating third-party APIs in production systems.
- Elasticsearch/OpenSearch analytics pipelines; Apache Spark (Scala, AWS EMR) data pipelines aggregating Cassandra raw event data into PostgreSQL reporting datasets.
- Cassandra (6-node production cluster, time-series data modeling), PostgreSQL (query optimization and reporting workloads), RabbitMQ (distributed messaging pipelines).
- BEAM VM tuning, relup zero-downtime upgrades, CI/CD pipelines using Jenkins, and infrastructure-as-code automation with Ansible.
- AWS infrastructure (EC2, RDS, S3), Linux systems operations, and Fly.io application deployments for personal and side projects.
- Technical leadership: managing and mentoring up to 5 engineers while remaining hands-on in system architecture, backend development, and production operations.

## PROFESSIONAL EXPERIENCE

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<b>Lead Distributed Systems Engineer</b>	<b>Ionik (formerly VeriAS)</b>	<b>October 2014 – Present</b>
<ul style="list-style-type: none"><li>• Lead architect and primary backend engineer for a revenue-critical affiliate network platform using <b>Erlang/OTP</b>, supporting <i>\$2.5M+ monthly revenue</i> and processing <i>1.5M + events daily (~20+ events/sec average with significantly higher peak throughput)</i>.</li><li>• Architected and built a network administration tool from inception, a full-stack <b>Elixir (Phoenix + LiveView + Ash Framework)</b> internal infrastructure control platform enabling resource lifecycle orchestration, authorization modeling, operational auditability, and cross-system automation. Included</li><li>• Designed and maintained <b>REST APIs</b> and internal service integrations supporting high-volume tracking, analytics, and partner platform connectivity.</li><li>• Designed and operated distributed data and messaging architecture including a 6-node <b>Cassandra</b> production cluster, <b>RabbitMQ</b> event pipelines, and <b>Elasticsearch/OpenSearch</b> analytics infrastructure.</li><li>• Owned data modeling across Cassandra and <b>PostgreSQL</b>; routinely debug and optimize complex production SQL queries and high-volume transaction paths. Built Elasticsearch reporting for detailed reports and aggregated performance analytics.</li><li>• Developed <b>Apache Spark</b> (Scala, AWS EMR) data pipelines aggregating Cassandra raw event data into PostgreSQL reporting datasets used for analytics and financial reporting.</li><li>• Responsible for <b>system reliability</b>, BEAM VM tuning, release strategy (relup), CI/CD automation, and production incident debugging across distributed environments.</li><li>• <b>Led and managed</b> 5 engineers (UI + infrastructure) while remaining hands-on across backend, data architecture, and full-stack feature delivery. Conducted technical interviews and evaluated engineering candidates as part of the hiring process.</li></ul>		
<b>Application Programmer</b>	<b>CGI Federal</b>	<b>December 2013 – October 2014</b>
<ul style="list-style-type: none"><li>• Performed detailed source code analysis for enterprise Java/ADA systems.</li><li>• Developed tooling and assisted with build/release workflows for multi-million SLOC applications.</li><li>• Created smoke and sanity testing processes supporting production releases.</li><li>• Contributed to build automation and release processes supporting large-scale enterprise deployments.</li></ul>		
<b>In-House Technician</b>	<b>Wichita Online</b>	<b>April 2013 – December 2013</b>
<ul style="list-style-type: none"><li>• Provided in-field network troubleshooting and wireless equipment deployment (MikroTik, Canopy routers).</li></ul>		
<b>Manager</b>	<b>Outback Steakhouse</b>	<b>November 2011 – April 2013</b>
<b>Computer Science Tutor</b>	<b>Cameron University</b>	<b>August 2012 – December 2013</b>