

# Seth Linares

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## EDUCATION & CERTIFICATIONS

### Brigham Young University-Idaho

*B.S. in Computer Science*

Rexburg, ID

*Apr. 2022 – Jul. 2024*

- **GPA:** 3.99/4.0, BYU-I Academic Scholarship (*Full Ride*)
- **Relevant Coursework:** Algorithms & Complexity, Parallelism & Concurrency, Applied Programming, Machine Learning, Big Data Programming, Data Structures, Discrete Mathematics, Linear Algebra, Multivariable Calculus

### Brookdale Community College

*A.A.S in Network Information Technology*

Lincroft, NJ

*Jan. 2019 – Dec. 2021*

- **GPA:** 3.9/4.0, Brookdale Foundation and Alumni Scholarship

### AWS Certified Solutions Architect - Associate

Aug. 2021 – Aug. 2024

## TECHNICAL SKILLS

**Languages:** Python, Java, JavaScript/TypeScript, SQL (Postgres), C/C++, C#, Go, Rust, Powershell

**Frameworks & Tools:** React, NextJS, ASP.NET, Pandas, AWS, Docker, Kubernetes, Git Ansible, Redis

## EXPERIENCE

### IoT Developer

April 2024 – Present

*Assured Automation, Roselle, NJ*

- Architected an enterprise IoT platform extending ChirpStack's capabilities that processed over **2,000 daily events** from **150+ devices** and reduced operational costs by **40%**
- Implemented real-time monitoring and alerting system that achieved **sub-500ms** latency for **20+ concurrent users** using TimescaleDB and Redis
- Developed custom visualization platform to replace Grafana, reduced licensing costs by **\$3,588** annually and delivered **8+** configurable visualization types for diverse measurement data
- Engineered cloud infrastructure migration using Kubernetes and Docker that improved deployment reliability by **25%** and reduced maintenance overhead by **35%**
- Designed scalable data transformation pipeline that supported **12+ sensor types** and automated data processing for diverse industrial applications
- Implemented tenant isolation and role-based access control with **3 organization levels** that enhanced platform security while maintaining data access flexibility

## PROJECTS

### CodeCoach | C#, ASP.NET, NextJS, PostgreSQL, Docker, OpenAI API

April 2024 – Present

- Reduced code execution latency by **40%** by implementing an optimized Judge0 API integration with parallel request handling and proper error management
- Enhanced platform security by implementing **3-layer authentication** including email verification, 2FA, and rate limiting to **40 requests/minute**, resulting in **zero security incidents**
- Expanded learning accessibility to **3 major programming languages** by developing a unified testing framework handling C#, Python, and C++ with automated performance metrics
- Increased student engagement by **35%** by integrating OpenAI's API for personalized coaching across **4 fundamental programming topics** with persistent conversation tracking

### PawPass | Rust, Tauri, React, TypeScript, TailwindCSS

February 2024 – Present

- Engineered a zero-trust desktop password manager using Tauri architecture, **reducing attack surface by 70%** through local-only processing and hardware-level security features
- Implemented military-grade encryption featuring a **3-tier key hierarchy** with configurable derivation parameters, achieving **256-bit security** while maintaining **sub-100ms** decryption times
- Built robust data protection with atomic saves and concurrent access management, successfully handling **1000+** encrypted entries with **zero** corruption incidents
- Architected secure memory management incorporating **4 protection mechanisms** including automatic zeroization and memory locking, eliminating **85%** of potential memory-based vulnerabilities