

Nathan Ferdowski

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Education University of Illinois Urbana-Champaign
Bachelors of Science, Computer Engineer 2018

Experience **SkillStorm**
Jul 24 - Oct 24 Power Platform Developer (C#, JavaScript, TypeScript, HTML, Azure Functions, Cosmos DB)

- Developed scalable business applications for both external users and internal teams using Canvas Apps, Model-Driven Apps, Power Automate, and Power Pages integrated with Dataverse.
- Created and exposed custom REST APIs using Azure Functions to securely perform CRUD operations on Cosmos DB, enabling dynamic data retrieval and updates from Power Platform apps.
- Managed environments and security by utilizing business units, security groups and security roles.
- Streamlined business workflows by automating approvals, notifications, and data transformations with Power Automate flows integrated into end-user applications.

PMM
Mar 23 - Jun 24 Co-Founder & Software Engineer (Next.js, AWS Amplify, Lambda, DynamoDB, S3, Cognito, Stripe)

- Designed and deployed a serverless system architecture using AWS Amplify, integrating Cognito, API Gateway, Lambda, S3, and DynamoDB to deliver a scalable, secure, and modular backend for dynamic user workflows and media storage.
- Built a dynamic, session-aware cart and image upload system using Next.js, DynamoDB, and S3, supporting both guest and authenticated users with identity-based access control.
- Integrated Stripe Checkout and webhooks to handle secure payments, and triggered post-payment workflows including order persistence and automated transactional emails via AWS SES.

AT&T
Feb 19 - Jan 22 Software Engineer (Angular, Node.js, TypeScript, Vega-Lite, Splunk, Micro-Frontend)

- Front-End developer for a cybersecurity visualization web application using Angular, Node.js, Vega-Lite and a Micro-Frontend architecture.
- Designed and implemented a rule-based heuristic detection model using log data from Splunk, improving the identification of potential security threats across internal network activity.
- Collaborated with cybersecurity teams to perform data analysis on internal traffic and anomaly patterns, generating dashboards and executive reports that informed policy and security decisions.

Projects

Apr 25 - Apr 25 **Distributed Logistics Tracker** (Spring Boot, RabbitMQ, PostgreSQL, Docker)

- Built a microservices-based logistics simulation using Spring Boot, with services for intake, routing, and tracking packages.
- Implemented asynchronous communication between services using RabbitMQ queues to simulate real-world message passing in distributed systems.
- Built a containerized PostgreSQL environment using Docker to mirror production conditions and support isolated service testing.

Mar 25 - Apr 25 **Litecoin Whale Watcher** (Python, PostgreSQL, AWS EC2, Docker, Nginx, Node.js, Express)

- Built a full-stack crypto analytics tool that tracks the top 200 Litecoin addresses activity.
- Automated whale transaction detection using Python and APIs, sending alerts to a Telegram group.
- Containerized and deployed a PostgreSQL database with Docker on AWS EC2 to persist and query wallet transaction data.
- Created a secure REST API using Node.js and Express to serve tracked whale data, reverse-proxied behind NGINX with HTTPS via Let's Encrypt.

Feb 25 - Feb 25 **Premier Fantasy App** (Spring Boot, PostgreSQL, Next.js, Web Scraping)

- Built an interactive FIFA Ultimate Team-style web app where users can build their fantasy team.
- Engineered a full-stack architecture with a Spring Boot backend and PostgreSQL database, exposing RESTful APIs for efficient player data management.
- Automated the extraction of player statistics via web scraping, cleaning and structuring player data for persistent storage and API consumption.

Jan 25 - Jan 25 **Personal Website** (Next.js, Tailwind CSS, Vercel, GitHub)

- Developed a responsive personal website utilizing Next.js to showcase professional information.
- Live at nathanferdowski.dev

Skills: JavaScript, Python, Java, PostgreSQL, Node.js, REST APIs, Git, Docker, CI/CD, Cloud Architecture, DevOps, Agile

Certifications: AWS Solutions Architect Associate, Microsoft Power Platform Functional Consultant, Google Data Analytics Professional