Nate **Stott**

Software Engineer · Computer Scientist

Logan, Utah, USA

+1 (801) 708-3373 | nate.stott@pm.me | funkybooboo | nate-stott1

Professional Summary

Software engineer with extended internship at Domo based on strong performance contributing to production systems at scale. MS Computer Science candidate at Utah State University specializing in Artificial Intelligence, with demonstrated mastery of core AI concepts. Nominated for TA of the Year 2025, delivering lectures and mentoring students on software development practices, design patterns, and real-world engineering challenges. Nominated for Undergraduate Researcher of the Year 2024.

Strong advocate for Twelve-Factor App methodology, applying these principles rigorously to ensure scalability, maintainability, and cloud-native deployment. Linux power user running GrapheneOS for security hardening. Solve daily LeetCode problems and regularly tackle CodeCrafters challenges to maintain sharp algorithmic thinking and deepen systems programming knowledge.

Core competencies: software architecture and design patterns, artificial intelligence and machine learning, systems programming and automation, DevOps and infrastructure-as-code practices, and technical mentoring.

Skills

Code	Java/Kotlin (SpringBoot, Jakarta, Lombok, MapStruct, Thymeleaf, Hibernate, Jetpack Compose, Android, Gradle, Maven, JUnit); JavaScript/TypeScript (React (React Query), React Native, Vue, Next, Node, Bun, Express, Redux, Prisma, Jest, Storybook, Prettier, Electron, Webpack, ESBuild, Vite, ESLint); Python (Django, Flask, SQLAlchemy, Tkinter, NumPy, Pandas, SciPy, Matplotlib, PyTorch, PyTensor, Gymnasium, Openpyxl, Xlwings, Black, Poetry); C/C++ (Make/Autotools, GCC/Clang toolchains, GDB, GTest, CMake, Qt, RAII); Rust (Tokio, SQLx); C# (.NET, ASP.NET, Entity Framework, Dapper); Go (Gin, GORM, sqlx); Bash/Zsh; PowerShell; HTML; CSS (sass, tailwind, bootstrap); x86 Asm (NASM); Lua; Haskell; Nix (flake, command); Dart (Flutter).
Tools	Git; GitHub (Secrets, Actions/Act, Copilot, Gh); GitLab (Self hosting); Vim; Neovim; JetBrains; Visual Studio; VS Code; JAWS; Selenium; Cypress; Playwright; Postman (newman); Vitest; LaTeX (Overleaf, Pandoc); Markdown (Obsidian); UML (draw.io, Lucidchart); Jira; Figma.
Data	MySQL; MariaDB; PostgreSQL; SQLite; Azure SQL; MongoDB; Redis; Elasticsearch; JSON; YAML; TOML; XML; CSV; Neo4j; Pinecone; Qdrant.
Hosting	AWS (EC2, S3, Lambda, IAM, VPC, RDS/Aurora, DynamoDB, ElastiCache, API Gateway, SNS, SQS, EventBridge, Route 53, ECS, EKS, Step Functions, Elastic Beanstalk); Google Cloud (Compute Engine, Cloud Functions); Azure (App Service, Functions, AKS, DevOps, Storage); DigitalOcean (Droplets, Domains); Heroku (Dynos); Vercel (Serverless Functions); Docker (Hub, Compose, Swarm, Networking, Volumes); Podman; Kubernetes; Multipass; Nginx; Apache (HTTP, Kafka); IIS; Jenkins; SSH (OpenSSH); QEMU/KVM; VMware; VirtualBox; Cloudflare; Datadog; LogRocket; Sentry; Railway; Linux (Debian, RHEL, Arch, NixOS, systemd services & timers); FreeBSD (Ports); MacOS (Homebrew); Windows (Chocolatey, Scoop, Winget, Windows Services, Task Scheduler, PowerShell).
Services	Appian; Azure Active Directory; Box (API); Contentstack; GitHub (API); GitLab (API); Hugging Face; Ollama; OAuth 2.0; Okta; OpenAI; OpenAPI; OpenID Connect; PayPal; REST (JSON, HTTP verbs); SAML; Shopify; Klarna; SOAP; OCPP; Stripe; Swagger; Twilio; WebSockets (Socket.IO, WS); WordPress; n8n.

Experience

Domo *American Fork, Utah*

Software Engineer Intern *Sep. 2025 - Present*

- Integrated Domo's data platform with cloud warehouses like Snowflake and BigQuery for reliable data transfer.
- Built and optimized data pipelines using Databricks and SQL to handle large-scale datasets and reduce processing time.
- Improved system performance by refining database queries, API requests, and caching strategies.
- Automated routine data validation and monitoring tasks, reducing manual effort and increasing data accuracy.
- Collaborated cross-functionally with engineers, analysts, and product managers in an Agile/Scrum environment.

Utah State University *Logan, Utah*

Graduate Teaching Assistant *Aug. 2025 - Present*

- Deliver lectures and labs for CS5110 (Multi-Agent Systems) and CS3450 (Introduction to Software Engineering), going beyond traditional TA responsibilities.
- Mentor students on proper software development practices and design patterns, guiding them through real-world software engineering challenges that prepare them for their careers.
- Collaborate with faculty on research projects and contribute to curriculum development.
- Develop and grade assignments, exams, and projects to assess student learning and provide constructive feedback.

Provider Resources Inc *Erie, Pennsylvania*

Junior Software Engineer *Oct. 2024 - Sep. 2025*

- Drove innovation through agile development practices and Test-Driven Development (TDD) to ensure high-quality code and reduce bugs.
- Conducted penetration testing on web applications, identifying vulnerabilities and enhancing overall security posture.
- Spearheaded the adoption of Docker, improving security, modularity, and development speed across teams.
- Led the removal of legacy code and outdated practices, implementing streamlined solutions to address cross-team challenges.
- Transitioned team from Azure DevOps to GitHub, establishing an efficient CI/CD pipeline that enhanced productivity.
- Engineered web applications using Microsoft .NET (C#) and React, adhering to best coding practices for high-quality delivery.
- Drove company-wide workflow automation initiatives, significantly reducing manual tasks and operational costs across departments.

Certifications

edX *Remote*

Introduction to Linux *May 2024*

- Completed verified certificate program covering GNU/Linux fundamentals and shell scripting.
- Gained proficiency in Linux system administration, command-line operations, and automation scripting.

Amazon Web Services *Remote*

Cloud Practitioner Foundations *Sep. 2023*

- Built foundational knowledge in core AWS services including EC2, S3, Lambda, and CloudFormation.
- Gained hands-on experience using the AWS CLI and SDKs to automate deployments.
- Demonstrated understanding of AWS security best practices, including IAM roles, policies, and the shared responsibility model.

Projects

Alle - Task Management Application *Remote*

Creator *Ongoing*

- Built custom task management application from the ground up using React 19/TypeScript frontend and Rust/Tokio backend with GraphQL API to extend TeuxDeux functionality with features tailored specifically to personal workflow needs.
- Implemented drag-and-drop task organization, automatic rollover for incomplete tasks, recurring task patterns, and offline functionality addressing productivity needs that off-the-shelf applications couldn't satisfy.
- Developed comprehensive testing strategy with 60+ tests (unit, integration, E2E) achieving high code coverage across the monorepo architecture.
- Utilized SeaORM with SQLite, Tower HTTP framework, and containerized deployment with Docker Compose.

Rylee - Chess Engine *Remote*

Creator *2025*

- Developed advanced chess engine mimicking human playing behavior using AI techniques and machine learning.
- Implemented naturalistic gameplay patterns that go beyond simple optimization to capture nuances of human decision-making.

Electric Vehicle Charger Reservation Service *Logan, Utah*

Contributor *Jul. 2024 - Dec. 2024*

- Contributed to React/Express web application for EV charging reservations with PayPal integration and OCPP protocol for real-time communication with charging stations.
- Integrated LSTM neural network to predict electricity prices and provide dynamic cost estimates for users.
- Co-authored research published in IEEE on web application enabling precise management of EV charging reservations with dynamic power curtailment.

Publications

IEEE *Remote*

Electric Vehicle Charger Reservation Service *Aug. 2024*

- Published research on web application enabling precise management of EV charging reservations with dynamic power curtailment.
- Demonstrated integration of LSTM neural networks for electricity price prediction and OCPP protocol for real-time communication.
- Currently deployed at Utah State University's Electric Vehicle Roadway (EVR) facility.

ACM *Remote*

Comparing Feedback from Large Language Models and Instructors *Apr. 2024*

- Co-authored paper presented at Learning@Scale 2024 evaluating AI feedback effectiveness in computer science education.
- Developed algorithms to prompt ChatGPT-4 to provide feedback on student submissions.
- Analyzed data collected from user studies to draw conclusions and make recommendations.

Education

Utah State University *Logan, Utah*

M.S. in Computer Science *Aug. 2025 - Jul. 2026*

- Specializing in Artificial Intelligence with focus on machine learning, distributed systems, and cloud computing.
- Actively involved in research projects related to AI and data engineering, including multi-agent systems.
- Published peer-reviewed research in IEEE and ACM conferences.

Utah State University *Logan, Utah*

B.S. in Computer Science *Aug. 2021 - Dec. 2024*

- Led group projects and coordinated tasks to ensure timely delivery of project milestones.
- Excelled in coursework with high academic recognition, consistently achieving top grades.
- Active member of Free Software and Linux Club, participating in coding competitions and hackathons.

For more details, visit my LinkedIn.