SCOTT ELLIOTT

Environmental Scientist → Software Engineer
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🧑‍💻 Technical Profile

Software engineer and systems architect with a multidisciplinary foundation in environmental science, legal operations, and sustainable systems. Combines 5+ years of federal tech systems experience at the EPA with formal software engineering education to design and build scalable solutions at the intersection of data, policy, and environmental impact. Currently advancing technical expertise through a Graduate Certificate in Software Design & Development while developing portfolio projects that apply engineering principles to complex domain problems.

🛠️ Technical Expertise

Software Engineering

- **Languages/Core Competencies:** C++, Java, Python, SQL, Object-Oriented Design, Data Structures & Algorithms, Software Architecture, Systems Design, Database Management, Version Control (Git)
- **Development Practices:** Agile/Scrum, CI/CD, Testing, Documentation (PlantUML), API Design, full-stack, cloud computing, and scalable system architecture through formal UW curriculum

Domain-Informed Systems Experience

- **Federal Tech Systems:** FOIAXpress, Relativity, RelOne Gov, FOIAOnline, SharePoint
- **Data & Analytics:** Custom reporting systems, workflow automation, data analysis, GIS integration
- **AI/ML Applications:** Google AI Essentials, Building AI certification, practical AI implementation

Certifications & Education

- **Google AI Essentials Certificate** (Coursera, 2025)
- **Building AI with "Your AI Idea" Honors** (MinnaLearn, 2025)
- **Graduate Certificate in Software Design & Development** – University of Washington Bothell (Expected 2026, Current GPA: 4.0)
- **Master of Forest Resources** – University of Washington (2020, GPA: 3.9)

💼 Professional Experience

U.S. Environmental Protection Agency (EPA), Region 10 – Seattle, WA
Systems & Operations Specialist (2020–2026)

- **Systems Modernization Leadership:** Served on national editorial board that redesigned and documented EPA's FOIAXpress system, creating agency-wide technical documentation adopted as standard reference across all regions.

- **Data Systems Development:** Designed and implemented custom analytical reporting tools to track performance metrics, optimize resource allocation, and ensure statutory compliance.

- **eDiscovery Systems Management:** Led complex document review operations using Relativity and RelOne Gov, developing methodologies, and ensuring data integrity for thousands of records.

- **Technical Process Optimization:** Created standardized operating procedures, automated workflows, and SharePoint repositories that reduced manual processing time and improved system reliability.

- **Cross-Functional Technical Coordination:** Bridged IT, legal, and environmental divisions to align system capabilities with operational requirements and federal compliance standards.

Finca Sylvatica / Jardin Salverde – Costa Rica
Founder & Technical Lead (2005–Present)

- **Data Systems Architecture:** Designed and maintained proprietary relational database system cataloging thousands of plant specimens with tracking for propagation history, genetic lineage, and ecological metrics.

- **Technical Infrastructure Planning:** Engineered on-site systems using sustainable building techniques while applying principles of scalability, maintainability, and system integration.

- **Technical Training & Systems Management:** Developed training programs and operational systems for 300+ international volunteers across two decades of continuous operation.

🚀 **Technical Project Portfolio**
Software Engineering Focus Areas
Applying formal software design principles to complex domain problems through hands-on system development:
Systems Architecture & Design

- **Environmental Data Systems:** Designing scalable APIs and data models for ecological datasets

- **Legal Tech Applications:** Building document processing and analysis tools informed by federal systems experience

- **Sustainable Systems Modeling:** Applying OOP and algorithm design to environmental and agricultural data

Current Development Stack

- **C++:** Systems-level applications and performance-critical tools

- **Java:** Enterprise applications and backend services

- **Python:** Data processing, APIs, and automation systems

- **Full Documentation:** PlantUML diagrams, technical specs, and system architecture documentation

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🎓 **Education & Development**
University of Washington, Bothell
Graduate Certificate in Software Design & Development - Expected June 2026 - (3.9 GPA)
Technical Curriculum:

- Software Architecture & Design Patterns
- Advanced Data Structures & Algorithms
- Database Systems & Data Modeling
- Web Application Development
- Cloud Computing Fundamentals
- Agile/Scrum Methodologies
- System Integration & Testing

Development Philosophy: Combining rigorous academic training with practical application to build robust, scalable systems that solve real-world problems.

Additional Technical Foundation

- **Cascadia College:** Computer Software Engineering Studies (4.0 GPA) – C++, Java, OOP, AI Principles
- **Continuous Learning:** Active participation in AI/ML certification programs and technical skill development

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🖇️ **Integrated Expertise**
Why This Background Matters for Software Engineering:

- **Systems-Thinking Foundation:** 5+ years operating and improving complex federal tech systems
- **Domain Problem-Solving:** Deep experience with data-intensive applications in legal, environmental, and operational contexts
- **Technical Communication:** Proven ability to bridge technical and non-technical stakeholders through clear documentation and process design
- **Real-World Scale Experience:** Managed systems processing thousands of records while maintaining compliance, security, and reliability

Technical Differentiators:

1. Formal CS Education + Real Systems Experience
2. Software Engineering Principles applied to Complex Domain Problems
3. Architecture-First Mindset informed by Large-System Operations
4. Multidisciplinary Approach to Technical Solution Design