

# Scott Johnson

Researcher, Systems and Data Analyst, Software Engineer  
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## Education

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**Bachelor of Science in Computer Science, Minor in Mathematics**

**The College of William & Mary**, Williamsburg, VA

**May 2004**

## Certifications

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**Data Science Professional Certificate** (in progress)

**IBM**, Online

**Expected September 2021**

**Introduction to Agent-Based Modeling**

**Santa Fe Institute**, Online

**July 2021**

**Machine Learning**

**Stanford University**, Online

**October 2016**

## Professional Experience

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**OpenTable**, San Francisco, CA

**Senior Software Engineer**

**May 2017 - January 2021**

- Led cross-team architecture initiatives involving systems analysis and design, project planning, implementation, technical reviews, and documentation, and facilitated consensus-building and collaboration.
- Researched and prototyped novel technological approaches for organizational adoption, developed standards, and provided training and evangelism in the form of mentoring and group presentations.
- Developed and maintained software for cross-cutting concerns of platform architecture, information security, and high-performance data processing for microservices and APIs.

**Opower**, Arlington, VA / San Francisco, CA

**Software Engineer**

**June 2013 - April 2016**

- Analyzed the localization needs of international utility customers and designed and implemented algorithms to support the deployment of product features in regional markets.

- Optimized data processing by refactoring database stored procedures into batch processing pipelines, and managed performance and compatibility testing, achieving a 10x performance improvement in key flows.
- Developed and supported software for a real-time communication platform with dynamic data-driven messaging over SMS and email, consisting of batch pipelines, microservices, and APIs.

### **Implementation Engineer**

**July 2010 - June 2013**

- Managed the implementation process for customer software integrations and experimental program design, coordinated project timelines and requirements, and communicated technical details to project stakeholders.
- Performed data processing, analysis, and exploratory investigation of customer data, evaluated findings with program managers and statisticians, and integrated data collection processes with customer IT systems.
- Developed software scripts, command line tools, database workflows, and knowledge frameworks to automate the configuration and deployment process of a software as a service energy efficiency platform.

### **Integreon, Arlington, VA**

#### **Product Development Manager**

**May 2009 - June 2010**

- Managed product planning and development, defined product scope, collected and prioritized business requirements, created and maintained functional specifications, use cases and other project artifacts.
- Performed research and analysis of third party natural language processing and information retrieval technologies and developed proofs-of-concept to drive build vs. buy decisions for core product functionality.
- Guided the agile software development process between product managers, local and international software engineering teams, infrastructure engineering, and quality assurance to deliver product features.

### **ONSITE3, Arlington, VA**

#### **Software Systems Analyst**

**May 2006 - April 2009**

- Analyzed and debugged database and web server infrastructure issues, optimized database queries, proposed improvements to cross-functional technology teams, and provided Tier-3 support.
- Designed and developed a workflow-management application to automate key technical processes for operations staff.
- Developed and administered the corporate Internet web site and intranet web applications, and integrated with third-party content management systems.

### **Alexandria City Public Schools, Alexandria, VA**

#### **Long-term Substitute Teacher for Math and Special Education**

**2001 - 2006**

- Taught math, biology, and world civilization classes to ninth grade students and special education needs students.

- Constructed lesson plans and materials by analyzing the guidelines for the Virginia Standards of Learning exams.
- Designed novel computer-based lessons to incorporate the new One Laptop per Child program into the curriculum.

## Skills & Technologies

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- Software engineering for backend systems, microservices, and REST APIs
- Software testing, support, troubleshooting, and debugging
- Data analysis, data processing, and design of batch pipelines
- Database architecture, schema design, and query optimization
- Systems analysis, requirements development, systems architecture design, and technical reviews
- Technical project management with Agile/Scrum methodologies
- Technical documentation, knowledge organization, and software archeology
- Collaboration, conflict resolution, and cross-team communication
- Mentoring, training, evangelism, and developer culture
- **Java:** JDK 8/11+, Maven, Jetty, Netty, JDBI, Hibernate, Spring, Spring Boot, Spring Batch, Dropwizard, Jersey, Reactive Streams, Reactor, JUnit, Mockito, WireMock
- **Other languages:** Ruby, Python, Bash shell scripting, C# .NET, HTML, CSS
- **Databases:** SQL, MySQL, PostgreSQL, Microsoft SQL Server
- **Continuous integration:** Jenkins, TeamCity
- **Monitoring:** Kibana, Grafana
- **Systems:** Linux, Unix, macOS
- **Other technologies:** Docker, Git