

Thomas Gideon

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<http://www.thecommandline.net/resume>

PROFILE

Experienced software professional with considerable depth of experience and breadth of skills in both professional services and product development environments. Maintains a strong personal development process and interest in helping to establish or improve shared processes and practices. A team player as well as a leader, with solid initiative and the ability to help others focus and improve time and task management.

SKILLS

Skill	Rating	Years	Skill	Rating	Years
OOAD	9	11	EJB - 1.1 to 3.0	10	7
Java - 1.0 to 6.0	10	11	Oracle - 7.3.3 to 10g	9	8
JBoss - 3.2 to 4.2.0	9	5	SQL - DDL, DML	9	10
Glassfish - 2.0, 2.1	8	2	HTML	10	17
PHP - 4.x, 5.x	7	6	JavaScript	9	14
Python - 2.4 to 2.6	8	3	Linux	8	11
Django	5	1	PostgreSQL	4	7

EXPERIENCE

Engineering Team Lead, Learning Objects Inc.; Washington, DC — 2008-Present

Learning Objects is a social learning software-as-a-service offering that integrates with the leading learning management systems (LMS) used by higher education institutions. At its core the service provides flexible content and collaboration tools, specifically wikis, blogs and podcasts and adds advanced customization and a rich permissions model for sharing.

- Introduced the use of JMS for initiating long running processes without holding up the user interface layer. Wrapped the JMS code in a higher level API to make this capability easier for the rest of the team to use as needed.
- Optimized the database design and overall query performance. The original database was basically a key-value store implemented in PostgreSQL using JPA/Hibernate. Evolved the database schema to make better use of normalized data and indexes. Re-factored the JPA/Hibernate persistence layer to make the introduction of new entities largely transparent to the higher layers of the application. Regularly ran and read query execution plans to adjust indexes and re-wrote SQL queries as needed.
- Wrote a reporting application using Django and Python to parse and crunch custom access log data and allow for querying of the synthesized data. This application included a couple of data mart style transformations run periodically to make aggregate queries over longer time spans more efficient. The reporting application including a modestly flexible ad-hoc reporting interface using AJAX to marshal conditions to and from the server so operations could run what-if style speculative reports to help identify performance problems. The reporting application repeatedly helped narrow down code

in the application itself to spot the aforementioned queries that needed to be analyzed and re-written.

- Currently leading the effort to migrate the application from a relational data store to a key-value data store, specifically Cassandra. The driver for this move is the lack of horizontal scaling compatible with the existing persistence layer (JPA/Hibernate) and concerns around how quickly the data storage will need to scale as more tenants start using existing application clusters.

Principal Application Engineer, Brivo Systems LLC; Bethesda, MD — 2005-2008

Brivo Systems manufactures physical access control systems. Their hardware product is a Linux based appliance that drives RF card readers and executes local rules on which personnel should be granted access. They also maintained a software-as-a-service solution, a centralized application with a web interface to configure the rules for the appliances and allow customers to review security event data sent back from the field.

- Hired and led a first class engineering team to maintain existing and build new products using industry best practices and the latest iteration of the enterprise Java technologies. Largely responsible for the technical design of server based products and was responsible for the engineering stake in requirements analysis, functional specification. Wrote a significant share of the application code and all of the lower level framework code that supported it, code that directly used application service capabilities and third party libraries.
- Re-wrote the company's flag ship software-as-a-service offering. Led the design efforts, organized the implementation team and implemented an equal share of the application logic. Interacted with product management to manage scope changes and with QA to start testing of the product's beta version which would eventually be delivered to qualified early adopters.
- Implemented new features and maintenance fixes for the existing access control server product, the human focused application, for roughly a dozen, feature-focused releases. Trained two of the new hires to help with maintenance programming in that same span. Problems resolved included SQL performance issues, race conditions in third party libraries, and simple mistakes made in the past in a largely monolithic, six year old code base.

VP of Software Engineering, Qbit LLC; Bethesda, MD — 2004-2005

Qbit is a small research and development startup that is seeking to revolutionize data compression. Their technical staff is made up of software and hardware engineers collaborating with a multi-disciplinary team of research scientists.

- Promoted to Director, then VP halfway through employment of about two years. Led recruiting efforts to grow engineering group to size of eight engineers on three teams.
- Managed engineering projects, on-going, including leading the project planning effort and establishing milestones. Facilitated communication with the research group as needed, and contributing to secondary engineering tasks like integrating third party libraries in Java and C.
- Developed business prospects. Regularly participated in discussions with potential customers and partners, often running technology demonstrations based on latest R&D deliverables and fielding in-depth questions about the technology and the research used to develop it.
- First engineering hire, originally sole implementer of the first research prototypes.

Contract Software Engineer, Amisys; Rockville, MD — 2003-2004

- Provided J2EE expertise for a project to convert a legacy healthcare application to that platform. Engineering work included more challenging components, like an RMI based distribution layer to allow any number of JSP-based screens to call legacy code over the wire. This lone effort allowed the rest of the team to run the J2EE components locally and share a remote legacy server, instead of constantly contending for the original combined server for unit testing.
- Reviewed architecture and made recommendations based on J2EE industry standards and best practices.

Lead Software Engineer, B2eMarkets; Rockville, MD — 2000-2003

B2eMarkets offered an online procurement system, based around an RFx model where the customers built proposals and bids and their suppliers submitted responses all to manage custom in the initial phases of procurement and supply chain management.

- Re-designed and re-wrote the responder interface as part of a larger re-write of the company's main product. Responder interface code was so cleanly built it was re-used to save several engineering weeks on two other sets of screens.
- Jointly designed the first version of the decision support module, an add-on to the main product that provided basic online analysis capabilities. Wrote a third of the code, mostly the mathematical algorithms. This project required a performance re-write halfway through and was still delivered on time.
- Designed and led team development of the first version of the supplier performance module. This was the first project that the product development team delivered early and under budget, with the lowest number of defects identified by quality assurance to that point.

Director of Internet Development, marchFirst; Bethesda, MD — 1997-2000

marchFirst was originally USWeb, a national software consulting firm focused exclusively on bringing businesses to the web with a focus on e-commerce. The DC practice also had a complementary focus on online collaboration applications.

- Promoted in late 1999 to Director. Started as a Senior Engineer.
- Worked on the largest number of any projects as an engineer both individually and as a team contributor. For all projects, performed requirements analysis, functional specification, technical design, and either implemented alone or as a senior member of a team.
- Participated in departmental planning, as a Director, both on organization and budgets.
- Worked with the quality assurance group, database administrators, and creative designers to help support the core engineering work flow.

Webmaster, IPC Technologies, Inc.; Richmond, VA — 1995-1997

- Promoted to Webmaster role in late 1996 to manage the company's own web sites, including pages for their certified training center which published regular training schedules.
- Worked on first internet development contracts, based on ASP, VB and COM, and SQL Server. ASP documentation was non-existent at the time, so I had to teach myself through experimentation and review of vendor code examples.

Student Consultant, Technology Services, College of William & Mary; Williamsburg, VA — 1992-1995

EDUCATION

College of William & Mary, Williamsburg, VA — BFA, 1995

CERTIFICATIONS, ASSOCIATIONS

Certified Scrum Master (<http://scrumalliance.org>)

ACM Professional Member (<http://acm.org>)

Member-at-Large, USACM Council (<http://usacm.acm.org>)