

Lucas Beeler

lsbeeler@acm.org ■ (650)395-7716 ■ <http://www.lucasbeeler.net> ■ Fremont, California 94538

Overview

- Software professional with 10 years of experience in a broad mix of roles including lead consultant, senior software engineer, tech lead, product manager, and entrepreneur.
- Technical expertise in distributed computing, web services, enterprise integration, UI/UX design and cloud services & deployments.
- Business acumen and the ability to understand the business impact of technology. I've held client-facing roles and have experience using concrete skills like active listening and relationship building to create harmony & rapport between product, sales, and engineering stakeholders.
- Experience assembling and managing cross-functional teams, elucidating timelines and deliverables, and making educated trade-offs on what can be delivered on-time and in-budget.

Experience

GridGain Systems, Inc. Foster City, California

Technical Consultant for Professional Services, 2/2017–present

GridGain is the principal sponsor of the Apache Ignite project and offers a range of commercial middleware built atop Ignite. Both commercial GridGain and Ignite combine a distributed, in-memory object store with a massively parallel compute engine to enable compute and analytics to run collocated with the objects they touch. These systems provide ideal platforms for domains like HTAP, machine learning, etc.

- Recruited personally by the EVP of Sales and the VP of Professional Services to serve as the most senior member of the PS staff.
- Defined much of the operational and process culture of the PS organization, including framing interactions between PS and other business units, such as support, product management, and sales. Developed operational processes for PS activities like technical account management (TAM) and new client jump start.
- Built relationships with partners and subcontractors for training development and delivery and consulting fulfillment.
- Deliver in-the-field consulting to GridGain's most important customers in computational finance, health informatics, IoT, SaaS, and Telecomm. I still write code when necessary. I help customers define their core architecture and integrate their GridGain-based systems with other components of the Java enterprise ecosystem like Apache Kafka, Spring Boot, and Apache Cassandra. I learn whatever technologies I have to—quickly and flexibly—to meet the needs of my customers.
- Given my field experience, act as the voice of the customer in product management decisions.
- Present GridGain technology and reference architectures through conferences, meetups, and webinars. A sample is available at <https://youtu.be/MUF2qSDK86I>.

- Received the GridGain Top Performer award for calendar years 2017 and 2018.

GigaSpaces Technologies, San Jose, California

Senior Solutions Architect, 6/2016–2/2017

GigaSpaces develops and provides consulting services for a range of in-memory computing and cloud orchestration products. In-memory computing offerings include the XAP in-memory data grid (IMDG) and the InsightEdge analytics platform.

- Led multiple consulting engagements in health informatics, spearheading the development of systems with use cases ranging from a simple query cache for a BlueCross/BlueShield organization to a complex patient engagement workflow system for GigaSpaces' largest healthcare client.
- Once deployed and made available as a SaaS offering, around 40% of U.S. hospitals will subscribe to the patient engagement workflow system described above. Transaction volumes will average 6,000/sec.
- Acted as a client partner in engagements, assuming responsibilities for project management, resource management, and work factorization. Directed activity of outsourced and offshore partners.
- Provided pre-sales direction and technical advisory services to GigaSpaces' sales and marketing teams. Working with a senior sales director, I led development of sales narratives on the use of IMDGs for object-based enterprise integration hubs.

Captricity, Inc., Oakland, California

Professional Services Engineer, 11/2014–10/2015

Captricity is a machine-learning startup that uses crowd-sourced deep learning to digitize paper documents—including those with human handwriting—at greater than 99% accuracy. Clients were large enterprises like life & health insurers and government agencies with massive amounts of data locked in paper.

- Designed and built secure, high-capacity integrations that connected the EDM systems of enterprise clients to Captricity's digitization pipeline. Leveraged cloud-based services for messaging and data transformation, including Mulesoft and AWS S3, EC2, RDS, EBS and Lambda.
- Engineered integrations that included complex, compute-intensive steps, like running computer vision and statistical learning algorithms to recognize one or two pages of a given kind—such as a birth certificate or prescription record—from among hundreds of pages.
- Designed and managed scalable integrations that increased performance dynamically as client data increased. Built a parallel, distributed-memory compute cluster in the cloud that scaled from 1 to 16 GPU worker nodes as needed. Cluster workloads were computer vision heuristics for document recognition.

Unnamed Stealth Mode Startup, Fremont, California

Founder & Principal, 8/2013–9/2014

Worked to launch a startup offering a new approach to online dating. Novel features included harvesting users' location and calendar information and combining it with restaurant reviews and hours, allowing my site to

suggest dates to users—complete with day, time, partner and venue. Even if you're a little shy, it's hard to say no to a date when a cloud server makes all the arrangements for you. This lowered the barrier to getting users on dates, providing an advantage over existing sites where it's all too common for people to be matched but never meet in person.

- Employed an API-first design in which a JSON REST API was conceived and explicitly specified before any consideration was given to client UI/UX.
- Prototype clients were developed for both desktop and mobile platforms. The desktop client was an in-browser single-page application; the mobile client was an installable app for iOS devices.
- Explored options for deployment on and became deeply familiar with various cloud platforms, including Amazon AWS, Google App Engine, and IBM Bluemix.
- Developed a lightweight REST client framework that I used to harvest calendar information from the Google Calendar, Outlook.com, and Facebook Events APIs as well as restaurant and bar reviews from the Yelp and TripAdvisor APIs. I made the decision to develop my own framework because I found existing Java REST frameworks (e.g. Apache Jersey) too heavyweight for my needs.

Yorba Foundation, San Francisco, California

Senior Software Engineer & Product Manager, 4/2011–5/2013

Software Engineer, 6/2009–4/2011

Yorba was an open-source nonprofit whose mission was to bring tools for digital media to the Linux desktop. Photos, music, and videos are the stuff of peoples' lives—but tools for working with them on the open desktop lagged behind Windows and OS X. Yorba sought to change this, and up to the point the foundation was defunded in 2013, enjoyed many successes. Shotwell—the product that I managed—lives on as a project of the GNOME Foundation. My personal contribution to the project is evident by browsing the commit logs on [gnome.org](https://gitlab.gnome.org/GNOME/shotwell/commits/master).

- Served as tech lead for Shotwell, the most widely used photo manager on the Linux desktop. Shotwell ships out-of-the box as the default photo application on both Ubuntu and Fedora and is used by over half-a-million people.
- Provided product vision and leadership. Made feature decisions. Designed user interfaces and storyboarded user interaction flows.
- Wrote some 25,000 of Shotwell's ~115,000 lines of C and Vala code. My commit history is auditable at <https://gitlab.gnome.org/GNOME/shotwell/commits/master>.
- Made key architectural decisions and reviewed every changeset.
- Managed and mentored junior engineers inside Yorba as well as outside contributors through Google's Summer of Code program.
- Designed and implemented a RESTful web service client framework with support for the full spectrum of HTTP transactions, XML processing, and OAuth authentication. My framework enabled Shotwell users to publish photos to social web services like Facebook, Flickr, and Picasa Web Albums and later evolved into an API that allowed outside contributors to write plugins for less-common services.
- Designed and implemented other major Shotwell features, including color, exposure, and tone adjustment, one-click auto-enhance, and photo printing.

Academic Projects & Research

- Developed a novel interactive digital painting system that uses concepts from texture synthesis and image processing to achieve style-adaptation, or the ability to simulate a wide variety of artistic styles and media via a single stroke rendering algorithm. The system is implemented in C, C++, and GLSL and makes significant use of modern, programmable graphics hardware. A preliminary write-up and source code are available at <http://www.lucasbeeler.net/software/studio580/>.

Education

University of Michigan, Ann Arbor
B.S. & B.S.E. in Computer Science, 2008
Cumulative GPA 3.3 / 4.0

Technical Skills

- **Languages:**
Java, C, C++, Vala, Python, JavaScript, Objective-C, C#, XML, SQL
- **Cloud Platforms:**
Amazon AWS—EC2, S3, S3 events, EBS, RDS, MTurk, Lambda. **Google App Engine**—App Engine Platform, Datastore, Objectify, App Engine JPA interface.
- **Server-Side, Web Services, and SOA Technologies:**
RESTful web services, Java Servlets, Apache Tomcat, JDBC, JDK 1.5+ concurrency primitives, HTTP internals, XML DOM object-binding APIs (e.g. JAXB, PyXB)
- **Distributed Computing:**
MPI, Redis, JMS (implemented as Apache ActiveMQ), Apache Kafka, GridGain, GigaSpaces, Apache Ignite
- **Client-Side, Technologies:**
AngularJS, jQuery, Bootstrap, AJAX, standards-compliant HTML5 & CSS3, HTML & XML DOM processing
- **Databases:**
MySQL / MariaDB, PostgreSQL, IBM DB2, Apache Cassandra
- **Desktop Technologies & APIs:**
Gtk+/GNOME, OpenGL, WebKit, Win32 SDK, Qt/QML, Java AWT & Swing

Professional Organizations

- Vice President, University of Michigan ACM SIGGRAPH student chapter, 2006-2007
- Member, ACM, 2006-present
- Voting Member, GNOME Foundation, 2011-2013