

Resume: Brian M. Clapper

Email: bmc@clapper.org, bmc@ardentex.com

Professional Experience

March, 2016, to present

Databricks, Inc., 160 Spear St., 13th Floor, San Francisco, CA 94105

February, 2019, to present

IT Staff Data Engineer

Responsible for building end-to-end data pipelines, bringing data from various external systems into our data lake. Additionally:

- I am the tech lead for the data engineering team that builds and manages data ingestion pipelines and dashboards for the company's human resources team. In this role, I oversee the team's technical work, work with the product manager and stakeholders to prioritize data and understand requirements, mentor and guide the younger data engineers on the team, and ensure that we meet our deadlines and KPIs.
- I led the migration of more than 700 tables and their corresponding pipelines from the Spark Hive Metastore to Databricks [Unity Catalog](#)
- I help define and refine our data engineering infrastructure, working closely with the team's data architect.
- I work with management to define strategic directions for our team.
- I mentor younger members of the overall data team, not just those on the HR group.
- I have assisted with hiring, as the team continues to grow.
- I led the data migration from one vendor's learning management system (LMS) to a different one, requiring the migration and mapping of millions of rows of data.

June, 2018, to February, 2019

Engineer, Customer Success Operations Team

This short-lived team was responsible for a variety of operations-related duties within the Customer Success department. I joined the team during our initial implementation of our first LMS vendor's product. The team was dissolved within the year, and I moved to the IT department, as a data engineer.

March, 2016, to June, 2018

Senior Instructor and Curriculum Developer

I began working with Databricks in mid-2015, initially as an independent contractor doing Spark training and curriculum developer. In mid-March, 2016, I joined Databricks as a full-time employee, as a member of the education team. In that capacity, I:

- helped launch the Learning Management System (LMS) that we use to train customers and partners

- taught numerous Apache Spark courses, both at customer sites and at conferences like Spark Summit and Strata
- wrote Apache Spark curriculum
- built and maintained tooling and live servers to support curriculum and classes
- was instrumental in the development of our self-paced training offerings
- served as a subject matter expert on Spark, Scala and Python
- managed contractors who were tasked with updating some of our courseware
- managed our 2016 MOOC offerings

March, 2009, to date

Owner, President, and Principal Consultant

[ArdenTex, Inc.](#) 25 Walnel Dr., Royersford, PA 19468

From 2013 through early 2016, I did contract training, primarily as a subcontractor through New Circle (since acquired by [ProTech](#)). I taught classes in Apache Spark, Scala, Python, Ruby, Ruby on Rails, Java, The Play Framework, and Angular JS.

September, 2013, to June, 2015

Independent Consultant, [PHmHealth][], LLC

PHmHealth was a health care compliance-related startup. They had an existing Scala-based full stack application, and they need a few people to debug and enhance it. As part of this effort, I built a customer portal web application, using a Scala back-end REST server, with [Angular.js](#) (version 1) and [Twitter Bootstrap](#) on the front-end.

May, 2014, to January, 2015

Independent Consultant (subcontracted through [Chariot Solutions][]), [Angie's List][],

1030 E. Washington St., Indianapolis, IN 46202

Angie's List is a subscription service that provides reviews of local contractors and other services. They are in the process of rearchitecting and converting some of their existing systems to use [Scala](#) and the [Play Framework](#). They hired various consultants to help them in this effort. I did some part-time work for Angie's List, through Chariot Solutions.

May, 2012, to January, 2014

Independent Consultant, [Dryden Procurement Technologies, LLC](#), 1410 Russell Rd., Suite 204, Paoli, PA 19301

Dryden provides procurement analytics for companies trying to manage their indirect spending. I designed and built a client portal, to allow clients on-demand access to reports, graphs, and spending statistics. Now, instead of individually calculating reports for each client via spreadsheet formulas, Dryden personnel could simply upload the raw data to the portal, which produced both web-based and PDF reports and graphs automatically. The portal was implemented in [Ruby on Rails](#) with a [jQuery](#) front end.

December, 2013, to May, 2014

Independent Consultant, [Help HOPE Live](#)

Two Radnor Corporate Center, 100 Matsonford Road, Suite 100,
Radnor, PA 19087

Help HOPE Live is a non-profit that strives to help medical patients and their families use community-based fundraising to meet uncovered medical expenses related to transplantation or a catastrophic injury or illness resulting in a physical disability.

As a contractor, I was working with other consultants to help build and enhance the donation campaign web application. The application was written using [Python](#) and [Django](#), running against a [MySQL](#) database.

September, 2013, to February, 2014

Independent Consultant, Onswipe,

39 W. 14th St., Suite 205, New York, NY 10011

Onswipe was a company that converted publishers' content to mobile devices. I was contracted to develop an administrative application builder tool using the [Play Framework](#) and [Scala](#).

September, 2013

Independent Consultant, [Gregory FCA Communications](#)

27 West Athens Ave., Suite 200, Ardmore, PA 19003

Built a Javascript package (written in [CoffeeScript](#) and compiled to Javascript) to drive an HTML-based marketing quiz. The package is general-purpose and divorced from the look-and-feel of the HTML page.

October, 2012, to January, 2014

Independent Consultant, [Harmonic, Inc.](#)

4300 North First Street, San Jose, CA 95134

Harmonic builds and sells products for distributing, transcoding, and manipulating video. These products all have licensing needs. I was contracted primarily to help in the licensing area, from understanding and helping to maintain the current in-house licensing solutions to assisting in planning for future licensing needs.

June, 2012, to February, 2013

Independent Consultant, Zendayfus, LLC

Zendayfus was a below-the-radar startup, building a [Ruby on Rails](#)-based web application to aid in job searches. I was contracted to help bring the application to a launch-ready state.

May, 2012

Independent Consultant, A-Frame Technology Services, LLC

Parkview Towers, 1150 First Avenue, Suite 950, King of Prussia, PA 19406

Assisting A-Frame personnel in diagnosing performance issues with a [Spring](#)- and [Hibernate](#)-based application.
(Short-term contract.)

July, 2012, to September, 2012
Independent Consultant, [QAD, Inc.](#)
100 Innovation Place, Santa Barbara, CA 93108

Contracted to enhance a product data export capability for a the enterprise, Java-based product I originally helped to develop for FullTilt Solutions.

July, 2011, to September, 2011
Independent Consultant, JMV Services, Inc.'s ITS Property and Casualty Consulting subsidiary
17950 Preston Rd., Suite 750, Dallas, TX 75379

JMV Services provided software solutions for the insurance industry. JMV contracted me to build a custom [Java](#) library, to be integrated into the [Talend](#) data processing tool, using Apache [XMLBeans](#) to convert insurance-related data into an XML data export format.

July, 2011, to December, 2011
Independent Consultant, Orocast, LLC
Berwyn, PA

Orocast was a startup, developing a web- and smart-phone-based service. With another consultant, I built a prototype system, which Orocast then used to test the market with investors. While my colleague focused on the mobile user interface, I built the back-end services layer. We settled on a [Ruby on Rails](#) solution, to provide for later expansion to a full-featured web site

March, 2011, to July, 2012
Independent Consultant, Alphabuyer, LLC.
1410 Russell Rd., Suite 102, Paoli, PA 19301

Alphabuyer was a consumer group-buying site, currently focused on the energy market. I was contracted to help debug and enhance their [Python](#)- and [Django](#)-based software application.

August, 2010
Independent Consultant, Dow Jones & Co.
4300 Route 1 North, Monmouth Junction, NJ 08852

Made custom enhancements to my [curn](#) open source RSS reader, which Dow Jones used internally.

February, 2011 to May, 2011
Independent Consultant, [QAD, Inc.](#)
100 Innovation Place, Santa Barbara, CA 93108

Contracted to address some performance problems and correct some other defects in the enterprise, Java-based product I originally helped to develop for FullTilt Solutions.

June, 2010, to June, 2012
Independent Consultant, Hozzle Rocket, LLC
1123 Ashbridge Dr., Bryn Mawr, PA 19010

Hozzle Rocket was developing a web-enabled, subscription-based site for customers with multiple residences. The software is developed using [Ruby on Rails](#), with a [jQuery](#)-based user interface. As a consultant to Hozzle Rocket, I helped design the production-ready system.

February, 2010
Independent Consultant, [Technology Co-Pilot, LLC](#)
6743 E. Tyndall Circle, Mesa, Arizona 85215

Technology CoPilot provides custom integration and software development for, among other things, the [Stone Edge Order Manager](#) ecommerce order management software suite. I have done some integration work for Technology CoPilot, mostly PHP/Linux-based.

March, 2009, to February, 2011
Independent Consultant, SDI Health, LLC.
220 West Germantown Pike, Plymouth Meeting, PA 19462

SDI Health provides health care data solutions and analytics to various companies in the health care business space.

My duties, as an independent consultant for SDI, included:

- Tuning and reverse-engineering existing legacy systems
- Designing and implementing new data normalization software
- Participating in the rearchitecture of the internal data warehouse
- Providing software technical advice and direction

The data warehouse rearchitecture effort required consuming, normalizing, mastering and maintaining millions of rows of health care-related data records from disparate sources, using [Microsoft SQL Server Integration Services](#) (SSIS), Oracle, PL/SQL and custom components.

This was a 40-hour-a-week contract.

(SDI was acquired by IMS Health, which is now part of IQVIA.)

February, 2008, to March, 2009

Senior Software Engineer

Invite Media, Inc., 1716 Chestnut Street, Suite 4, Philadelphia, PA 19103

(Acquired by [Google](#) in June, 2010)

Invite Media built technology and provided network services to facilitate Internet optimized advertising. I was a senior developer of a small team that was responsible for specification, design, and implementation of large-scale, real-time, advertising bidding engine and ad server. The system was written primarily in [Python](#) with some components in [Java](#).

Other Past Employers

Enterprise Architect / Senior Developer

FullTilt Solutions, Inc., (acquired by [QAD, Inc.](#) in 2008),

1400 Liberty Ridge Drive, Suite 100, Wayne, PA 19087

I was one of a handful of senior-level developers of FullTilt's product data management tool. The product embodied a work flow that enabled a company to process, classify, attribute, search, maintain, and deploy large volumes of product data, while minimizing the need for data entry personnel. The product was an early full-stack browser-based application, written in Java and JavaScript.

The product was patented; I am listed as a co-inventor.

Enterprise Architect / Senior Software Developer

PLATINUM technology International, inc., (acquired by [Computer Associates](#) in 1999), Three Valley Square, 512 Township Line Road, Suite 300, Blue Bell, PA 19422

One of two architects responsible for overall design of PLATINUM's Open Enterprise Management System (POEMS), a unified infrastructure into which all PLATINUM products were integrating, to provide seamless operation, administration, and look-and-feel across the PLATINUM product line. The components were written in C and ran on [Microsoft Windows](#) NT and multiple versions of Unix.

N2K Inc., 435 Devon Park Drive, Suite 600, Wayne, PA 19087-1943

Senior developer, computer security professional, and internal staff consultant for N2K Inc, an Internet-oriented entertainment company and an on-line music retailer that ultimately merged with CDNow.

Tangram Enterprise Solutions (formerly, Rabbit Software Corp.), 7 Great Valley Parkway, Malvern, PA 19355

Senior developer and team leader for Rabbit Software, a small company that developed PC-based SNA networking software, primarily for the UNIX, DOS and Windows environments.

Naval Air Development Center (now the Naval Air Warfare Center in Patuxent River, MD), Warminster, PA 18974-5000

Senior developer and researcher for a department that focused primarily on defining, standardizing and building software engineering environments.

Navy Resident Affiliate

[Software Engineering Institute \(SEI\)](#), Carnegie Mellon University, Pittsburgh, PA 15213-3890

Selected to serve as NADC's Resident Affiliate to the SEI for one year. Served primarily as a Navy representative on the User Interface Prototyping Project, helping to build a UNIX-based user interface management system (UIMS) called [Serpent](#).

Programmer/Analyst

Financial Automation Corporation, a wholly-owned subsidiary of the Philadelphia Stock Exchange, 1900 Market Street, Philadelphia, PA 19103

Member of the technical staff responsible for maintaining and developing on-line trading system software.

Adjunct Instructor

[Temple University](#), Philadelphia, PA 19122

As an undergraduate, I taught an introductory Fortran programming course in the College of Engineering.

Publications

Bass, L., Clapper, B., Hardy, E., Kazman, R., Seacord, R. [The Serpent User Interface Management System](#). *Proceedings of the 1990 [USENIX Technical Conference](#)*.

Presentations

I periodically give presentations to local user groups. A list of those presentations can be found at <http://www.ardentex.com/publications/index.html>.

Videos

- [An Introduction to Pattern Matching in Scala](#) for [New Circle](#).
- [Intro to Spark class](#) (from Spark Summit 2015)
- [Intro to Spark Streaming](#) from a Philly Area Scala Enthusiasts (PHASE) [meetup](#).

Patents

Co-inventor: [US Patent #6,668,254](#), *Method and system for importing data*. (Also patented in Europe, [patent number EP1227411](#)).

Activities

- Founder of the [Philly Area Scala Enthusiasts](#) Scala users group.
- Former co-organizer of the [Northeast Scala Symposium](#).

- Co-organizer of the Philadelphia-area *Scalathon* Scala hackathon (2011, 2012).
- Member of the [Association of Computing Machinery](#) since 1983.

Education

B.A., [Computer and Information Sciences](#) (*Magna Cum Laude*)
[Temple University](#), Philadelphia, PA

Elected to [Phi Beta Kappa](#) in my senior year.