

Extended Resume: Brian M. Clapper

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President: [ArdenTex, Inc.](#)

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A [summary resume](#) is also available.

Professional Experience

March, 2009, to date

Owner, President, and Principal Consultant: [ArdenTex, Inc.](#)

25 Walnut Dr., Royersford, PA 19468

Current Contracts

June, 2010, to date

Independent Consultant, Hozzle Rocket, LLC, 1123 Ashbridge Dr., Bryn Mawr, PA 19010

Hozzle Rocket is 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 am helping to design and build the final system.

May, 2012, to date

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 am currently helping them design, build and launch a client portal, to allow clients on-demand access to their reports. The project is still in the design phase. Implementation technology will either be [Python](#) and [Django](#) or [Ruby on Rails](#).

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.)

Past Contracts

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 provides 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 is a startup, developing a web- and smart-phone-based service. (A non-disclosure agreement prevents my disclosing the exact nature of the 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 March, 2012

Independent Consultant, [Alphabuyer, LLC.](#), 1410 Russell Rd., Suite 102, Paoli, PA 19301

Alphabuyer is 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 uses 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 product I originally helped to develop for FullTilt Solutions.

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 requires 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.

February, 2008, to March, 2009

Senior Software Engineer

[Invite Media, Inc.](#), 1716 Chestnut Street, Suite 4, Philadelphia, PA 19103

Invite Media builds technology and provides network services to facilitate Internet optimized advertising. As one of the senior developers, I was a member of a small team that was responsible for specification, design, and implementation of large-scale, real-time advertising technology. As of March, 2009, Invite Media's systems were providing optimized advertising solutions to a number of customers.

The system was written primarily in [Python](#) with some components in [Java](#). It consisted of various Internet-visible servers and several back-end databases, and it is designed to scale to very large numbers of connections and transactions.

Technologies and techniques used included:

- Amazon's [Elastic Cloud Computing](#) (EC2) services
- Amazon's [Simple Storage Service](#) (S3)

- The **Hadoop** map/reduce framework
- The **Twisted Python** framework
- The **RabbitMQ** messaging framework
- **PostgreSQL**
- **Django**
- **SQLAlchemy**

These, and other, technologies were tied together with proprietary ad-serving software that provided highly optimized ad delivery.

June, 1999, to February, 2008

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 the FullTilt Perfect Product Suite product information management tool. We developed a business-to-business ecommerce product that streamlined the maintenance of product data. The product embodied a work flow process 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's server-side software was written entirely in **Java**. Perfect Product Suite's user interfaces consisted of browser-based HTML screens that interacted with server-side Java **servlets**.

Perfect Product Suite was able to import product data in a variety of formats, including spreadsheet data and Perfect Product Suite's **XML** format. Once the data was been normalized and attributed, Perfect Product Suite stored it in a relational database, where it was organized according a powerful, proprietary data model.

Perfect Product Suite performed all database access solely via **JDBC**; consequently, it ran against any robust, full-featured relational database that supports JDBC access. We explicitly supported and tested against **Oracle**, IBM's **DB2** and Microsoft's **SQL Server**.

Perfect Product Suite is patented; I am listed as a co-inventor.

As a senior developer, my duties included architecture, design, development, and, occasionally, sales support. I have worked on every component of Perfect Product Suite; among these components are:

- the UIs and servlets
- the database API, which mapped the relational database view to an object-oriented one
- the utility library
- the proprietary back-end Import Manager process that automatically classified and processed imported product data
- the XML parsing engine

In March, 2007, I assumed the position of Enterprise Architect, putting me in charge of the overall architectural direction of the product.

The members of our team were located all across the country, and many of us (including me) worked from home offices. Producing a quality product required us to master the challenges of collaborating across large distances and several time zones.

April, 1997 to June, 1999

Senior 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. As architect, my duties included:

- Reviewing designs to ensure consistency with existing POEMS architecture, future POEMS and PLATINUM product directions, and current development methods.
- Keeping abreast of architectural changes to POEMS software.

- Staying current with competing products and with industry trends.
- Designing components that reach across the internal POEMS teams.
- Participating in management decisions for current and future software releases.
- Analyzing requirements for internal POEMS consumers and external customers, and to help design and plan POEMS/product integration.
- Serving as internal senior consultant for other software developers.
- Engaging in short-term research and prototyping. In this capacity, I built a working Java prototype of the POEMS back-end IPC services. This prototype became the basis for our internal Java IPC solution.
- Assisting in software development and production (e.g., filling in on development teams when necessary).
- Participating in PLATINUM-wide architecture meetings.

Shortly after PLATINUM was acquired by Computer Associates, I left the company to join FullTilt Solutions.

October, 1993, to April, 1997

Senior Member of Engineering Staff

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.

During my tenure at N2K, my duties included:

- Designing and implementing a UNIX development environment.
- Designing and implementing a UNIX-based corporate firewall.
- Building and maintaining an in-house C++ tool library consisting of more than 200 reusable C++ classes.
- Designing and implementing a C++ network-based server to field credit card transactions and forward them through **Visa**-supplied hardware to a clearing bank.
- Building a C++ lex- and yacc-driven command shell for a proprietary full-text database system.
- Designing and partially implementing an NFS proxy to permit tunneling NFS traffic safely from behind the corporate firewall to machines in the firewall's DMZ. (See document entitled **Notes on a Proxy for Securely Tunnelling NFS through Firewalls** for details.)
- Filling in for and training our Unix system administrators.

February, 1991, to October, 1993

Senior Member of Technical Staff

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. Duties included:

- Performing system requirements analysis, design, and implementation, especially on the following components: Unix-based SNA RJE emulation software, large libraries of reusable software components, distributed configuration architecture, interprocess communications layers, custom language parsers, local software development tools, software internationalization support libraries, X-Windows and character-based user interface software.
- Acting as technical resource for first- and second-line managers.
- Mentoring less-experienced developers.
- Working with other development leaders and managers to analyze and solve technical and development process problems.
- Filling in for first-line management.
- Performing occasional customer support.

February, 1990, to February, 1991

Computer Scientist

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.

After returning from the Software Engineering Institute, I was assigned to a project that attempted to define a set of industry-based computer standards for the Navy. Responsibilities included:

- Examining and defining areas of possible user interface standardization.
- Participating in industry standards efforts.
- Following and reporting on current user interface research.
- Attempting to define long-range user interface goals for software development environments.
- Experimenting with various user interface paradigms and products.
- Serving as chairman of the user interface working group for a software engineering environments standards effort (NIST-ISEE) sponsored by the [National Institute of Standards and Technology](#).

Other duties included:

- Acting as an in-house Unix consultant.
- Performing occasional UNIX system administration.
- Serving on division's local area network planning group.

February, 1989, to February, 1990

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](#).

Duties included:

- Tuning user-interface language's compiler run-time code.
- Developing algorithms to replace a commercial production-model support package initially built into the system.
- Assisting the design and development of a graphical user interface editor.
- Writing X Windows-based UIMS demos.
- Building general purpose library routines for both internal use and release with the system.
- Fixing bugs.
- Writing documentation.
- Representing NADC's interests at the SEI.
- Keeping abreast of new technology, with an eye to its transition back into software practice at NADC.

In February, 1990, I co-authored a paper about Serpent and presented it at the Winter 1990 [USENIX](#) Technical Conference (available in the *Proceedings of the 1990 USENIX Technical Conference*).

May, 1985, to February, 1989

Computer Scientist

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

Initially served as a principal member of a team who developed a software engineering environment for System V UNIX. This environment, used by several Navy contractors, provided controlled access to the software development process; it consisted of a complex set of interdependent software tools and support utilities.

As a member of this project, my duties included:

- Performing analysis and overall system design.
- Developing inter-process communication facilities.
- Building support tools, such as a specialized include preprocessor and audit-trail management utilities.
- Creating general purpose library routines.

- Designing and implementing data protection software.
- Developing a message-driven user interface layer.

I also served as system manager for a network of UNIX-based workstations.

May, 1983, to May, 1985

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 software for Centramart II, a complex, event-driven computer system providing central trading support for the Philadelphia Stock Exchange. Duties included design and implementation of new software, as well as maintenance and enhancement of existing software. All software was written in an extended Pascal dialect, and ran on a Honeywell minicomputer.

January, 1983, to May, 1983

Adjunct Instructor

Temple University, Philadelphia, PA 19122

As an undergraduate, I taught an introductory Fortran programming course in the College of Engineering. I was solely responsible for course material, classroom presentation and examinations for a class of approximately 25 students.

Publications

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

Patents

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

Activities

- Member of the **Association of Computing Machinery** since 1983.
- Founder of the **Philly Area Scala Enthusiasts** Scala users group.

Miscellaneous

Languages: **Java**, **Scala**, **Javascript**, **CoffeeScript**, C++, C, C#, various assemblers, **Perl**, **Python**, **PHP**, **Ruby**, all UNIX shells, HTML, XML, SQL, **Emacs LISP**

UI technologies: **jQuery**, **GWT**

Frameworks: **Spring**, **Django**, **Ruby on Rails**, **J2EE**

Miscellaneous Tools: **Subversion**, **Git**

Cloud computing and related technologies: **Google App Engine**, **Amazon EC2**

RDBMS-related technologies: **Oracle**, **SQL Server**, **DB2**, **Hibernate**, **Django** (ORM), **SQLAlchemy**, **Squeryl**, **ScalaQuery**, **ActiveRecord**, **Microsoft SSIS** (including writing custom components)

Operating Systems: Most flavors of UNIX (including Solaris, HP/UX, AIX; **Open Source** operating systems such as **FreeBSD** and **Linux**); **Mac OS X**; **Windows**

Education

B.A., **Computer and Information Sciences**, May, 1983 (*Magna Cum Laude*)
Temple University, Philadelphia, PA

Elected to **Phi Beta Kappa** in April, 1983