

## **James J. Menard**

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### **Experience**

#### ***Senior Software Engineer***

**Display Social** 2018 - Present

#### ***Principal Software Engineer***

**Warby Parker** 2018 - 2021

As the Retail and Vision Services team's Principal Engineer, responsible for inter- and intra-team technical design review and decisions, code quality and maintainability, technical mentorship, and developer onboarding. Organized team architecture and technical discussions and gave multiple talks on various technologies. Lead team in increasing test coverage, PR review process improvements, and increased monitoring. Lead consulting team in implementation of card present tap-to-pay for retail locations. As a member of the Architecture Council, lead creation of API framework design practices and discussed technology organization-wide practices and policies. Earlier as an SRE Principal Engineer, rewrote retail print queue management services and installation scripts and implemented an AWS EC2 image management process.

#### ***Principal Engineer***

**Chloe + Isabel** 2015 - 2018

Work with the technology team to improve platform quality, reliability, scalability, and responsiveness. Lead the e-commerce platform's financial and operations systems team including inventory, order taking, promotion application, shipping and tax calculation, payment, shipping fulfillment, and commission calculation and payment. Work closely with Product, Operations, and QA to set priorities and milestones. As part of ongoing work to improve site reliability and scalability, found bottlenecks, improved performance of code and database queries, and upgraded tech platform. The team implemented international shipping, automated merchandiser payment, collect-on-ship, and more.

- Added multiple warehouse support and configurable shipment pricing and carrier override
- Made audit logging asynchronous, improving response times 14%
- Integrated with forum/publishing platform
- Managed on-call schedules and performed regular issue review with QA
- Documented major subsystems
- Restarted tech blog and wrote articles
- Organized and gave internal technical talks
- Gave code reviews and mentored all tech team members
- Assessed potential vendors and acquisitions
- Screened and interviewed candidates

***Sr. Dir. of Engineering and Architecture, Science***

**AIG 2014 - 2015**

Led and grew a team of developers focused on rapid prototyping and development of new applications that brought evidence-based decision making, innovation, and analytics (big data) to multiple business lines.

***VP of Engineering***

**nRelate 2013 - 2014**

Led, grew, and improved the technology platform and processes at a company that dynamically recommends and serves four billion related article links and ad impressions a month across over 100,000 sites. Created development life cycle, project management, and QA processes for software development and operations teams. Removed operational single points of failure. Improved system uptime, reliability, and fault tolerance. Led R&D and architectural redesign and replacement of core systems with more appropriate, scalable technologies. Lead data center and server infrastructure redesign and migration.

***Principal Engineer***

**General Assembly 2012 - 2013**

Senior member of development team. Prototyped and implemented new systems and researched technologies. Created CMS and implemented e-commerce financial systems.

***Director of Technology***

**ideeli 2011 - 2012**

Provided technical guidance, R&D, support, and mentorship for ideeli's core technology platform and the team. Technical lead for multiple projects including development of A/B testing framework and replacement of credit card vendor. Created prototype rules engine implementation of personalization engine. Acted as mentor for developers by teaching courses and reviewing code.

***Brain AI/Rules Lead***

**Kaplan Test Prep and Admissions 2009 - 2011**

Led and managed team responsible for building technology platform for taxonomy-based modeling of student knowledge and customized study recommendation, using business rules engine, custom code, and AI-based algorithms. Designed and deployed beta version of software; subsequently built and led team delivering scalable technology platform that will serve as basis for future Kaplan products. Acted as liaison with business users and subject matter experts, managing frequently-changing requirements and product goals. Oversaw selection of rules engine vendor and design of technology platform. Managed internal, vendor, and consultant deliverables.

***Consultant***

**Independent 2009**

Completely redesigned, rebuilt, and deployed the back end and content management of the Web site of a well-know Nickelodeon kid's TV show along with its content management and user-generated content workflow systems. The site has over 4 million registered users, serves over 270 terabytes of data monthly, and is available in 18 languages. Responsible for choosing the technology and designing, implementing, and delivering the software. The site runs on Amazon's EC2 and uses Ruby on Rails.

### ***Ruby and Rails Implementation Engineer***

**10gen** 2008 - 2009

Implemented Ruby language and framework support for the 10gen cloud computing platform using JRuby, Java, and server-side JavaScript. Created database and runtime environment adapters in Java and Ruby to allow Ruby on Rails and other Ruby frameworks to use the Babble app server and Mongo schema-free distributed database. Implemented the ability for Ruby code to call and be called by code in other languages. Developed a Ruby Mongo Object/Relational Mapper (ORM) framework, an ActiveRecord Mongo adapter, CGI session and logging database storage, a grid file storage wrapper, and more. Wrote a pure-Ruby Mongo driver and Ruby and Clojure examples for a Java driver. Enhanced Babble app server and JavaScript libraries. Wrote extensive unit tests. Presented talks at conferences and user groups.

### ***Senior Director of Technology***

**iAmplify** 2006 - 2008

Assumed leadership of tech team when VP of Engineering left the company. Designed, implemented, documented, and deployed new and improved features for company's core software platform, public and private Web services, financial and sales reports, software deployment tools, e-commerce enhancements, video feeds, branded Web sites, and more. Redesigned core technology platform and implemented core subsystems. Helped select new production hosting facility and planned and led production server and software transfer. Led e-commerce vendor selection. Introduced new technologies such as Subversion, Ruby, and Rails to team. Fixed MP3 encoding problems and many other technical issues. Acted as DBA and sysadmin. Met with potential clients and partners as company's technical representative. Performed R&D. Took part in VC due diligence process.

### ***Open Source Project Leader***

**Active Endpoints** 2004 - 2005

Project leader and community advocate for ActiveBPEL's open source BPEL engine. Liaison between Active Endpoints and the open source community. Managed developer relations, code releases, and Web site. Created code samples and tutorials. Taught BPEL Essentials course. Created BPEL certification exam. Provided developer support.

### ***Consultant***

**Independent** 2001 - 2005

- Redesigned and implemented **Preclick's** PhotoWiki. Designed and implemented the Instant Photo Messaging server and prototype client. Member of Preclick Technical Advisory Board.
- For **Expert Foods**, added Amazon interface, bug tracking system, and source code control.
- For **Warner Music Group**, selected and installed an Open Source guaranteed file delivery mechanism and worked on design of an E-commerce system.
- For **Variagenics**, added features to genetics sample tracking system.
- For **Sotheby's**, helped rebuild mainframe apps in Java.
- For **3Path**, selected and installed an Open Source reporting system.

- For the **Information and Content Exchange (ICE) Authoring Group**, developed two Open Source ICE reference implementations.
- As an **independent**, developed multiple Open Source projects and published "Building Applications With Berkeley DB Java Edition" and "Introduction to Ruby for Mac OS X".

***Chief Technology Officer***

**Strategic Legal Resources 2000 - 2001**

Founding member of startup executive team tasked with technical vision, prototype, implementation, and delivery of a B2C Web service. Through mergers and acquisitions, took responsibility for infrastructure of \$20M company. Enabled expansion from three offices to six. Evaluated, integrated, consolidated, and replaced disparate front- and back-office systems. Created new VPN, email, and financial systems. Managed desktop, server, and Web site support.

***Vice President, Application Engineering***

**Sotheby's 1999 - 2000**

Designed and implemented Sothebys.com b2b and b2c E-commerce auction site subsystems. Coordinated internal and contract technical resources. Increased site performance tenfold. Worked with business users to derive and simplify business and auction rules. Evaluated new technologies and developed prototypes. Acted as mentor to technology team.

***Director of Technology***

**New Media Productions 1998 - 1999**

Managed, directed, and grew technology department. Designed reference and framework architectures. Prepared and presented technical designs and work estimates. Introduced structured design and development practices.

***Associate Director***

**Cambridge Technology Partners 1996 - 1998**

***Project Leader, Macintosh Developer* MCI/News Corp. Internet Ventures 1995 - 1996**

***Software Engineer***

**Bolt Beranek & Newman 1995**

***Associate***

**Marble Associates 1993 - 1994**

***Senior Software Project Engineer***

**Xerox Corporation 1988 - 1992**

***Systems Analyst/Programmer and Administrator***

**Strong Memorial Hospital Cancer Center 1983 - 1988**

**Publications and Presentations**

"The Polyglot Programmer", presented to CT CTO Club in March of 2012.

"Ruby in the Clouds", presented at RubyConf 2008.

"Building Applications With Berkeley DB Java Edition", *Java Developer's Journal*,

September 2004.

"Unit Testing With OCUnit", O'Reilly's *MacDevCenter.com*, April 2004.

"Alternate Data Storage Technologies", online, presented to NY CTO Club, April 2004.

"Introduction to Ruby for Mac OS X", *MacTech*, March 2003 cover article.

"Ruby, an Introduction", online, presented to NY CTO Club, July 2001.

## **Technical Skills**

**Languages** Ruby, Python, Java, Scala, PHP, JavaScript, Common Lisp, Smalltalk, Objective-C, Bash, Perl, C, C++, Assembly

*Acquainted with:* Clojure, Elixir, Erlang, Go, Haskell, Fortran, Pascal

**Operating Systems** Unix (Linux, BSD, Solaris, etc.), macOS, Nextstep, BeOS, DOS, Windows, VMS

**Databases** MySQL, PostgreSQL, SQLite, Oracle, Sybase, Informix

**Frameworks and Tools** JRuby, Ruby on Rails, J2EE, Spring, Flask, Hibernate, Mongo, Babble, Tapestry, Cayenne, JSP, Servlets, JDBC, Ant, JUnit/XUnit, RMI, CORBA, (X)HTML, CSS, AJAX, XML, XML-RPC, SOAP, WSDL, BPEL, ICE, Apache, Tomcat, WebLogic, Prevayler, LaTeX, Yaws, Erlyweb, more

## **Education**

**University of Rochester**, Bachelor of Arts - May, 1983

Major: Mathematics, with a concentration in Computer Science

## **Professional Organizations**

**New York CTO Club**

## **Independent Projects**

**KeyMaster** Real-time MIDI performance software

**DataVision** Cross-platform graphical database reporting tool

**NQXML** XML parser written in Ruby

**Rice** Information and Content Exchange (ICE) protocol reference implementation in Ruby

**TwICE** ICE protocol reference implementation in Java

**midilib** Ruby MIDI file and event manipulation library

**Squeak** (Smalltalk) **PostgreSQL** interface