# **Philip Borenstein**

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pborenstein

Natick, MA

Talented technical communicator with over 25 years' experience writing documentation for developers.

- My background in software development allows me to learn new technologies quickly and to write documentation, example programs, and tutorials for both new programmers and seasoned developers.
- As the first person outside of engineering to use a product the way customers do, I provide valuable insight into user experience and functionality.
- My experience in nearly every facet of software development allows me to work efficiently with management, engineering, and marketing.

# **Experience**

▶ DataRobot Sep 2015 — Feb 2016

### Sr Documentation Engineer

DataRobot provides a platform to generate predictive models from complex datasets.

- Took over a stale documentation base that hadn't been updated in over six months. Updated documentation, prioritizing new features and backfilling updates of existing features.
- Wrote installation guide for on-premise deployment of product during which I found several bugs and race conditions in installation scripts.
- Created documentation build system that allowed building of multiple drafts for different branches and multiple authors.
- Provided Sphinx support for engineering teams producing in-house documentation for their libraries.

▶ **Joyent** Aug 2010 — Oct 2014

#### Sr Documentation Manager

As <u>Joyent</u>'s first dedicated technical writer, I was responsible for all customer-facing documentation for Joyent's cloud products: Joyent Public Cloud, Smart Data Center, and Joyent Manta.

I set up, deployed, and maintained all of the Joyent documentation servers.

#### **Joyent Public Cloud**

Joyent Public Cloud (JPC) lets customers create virtual machines on Joyent's infrastructure. JPC has a web portal as well as an <u>API interface</u>.

- Consolidated information from outdated DokuWiki site into a new Confluence-based wiki.
- Worked with product team to test and improve cloud management portal, especially on-boarding flow.
- Maintained and added examples and explanations for REST API using <u>Restdown</u>, a tool that uses

- structured Markdown to make attractive and useful reference API reference pages.
- Wrote up technical descriptions and how-to guides for reconfigured images such firewalls, database servers, Elasticsearch servers, and so on.
- Documented <u>Role Based Access Control</u> system which is used in all Joyent products.

#### **Smart Data Center**

<u>Smart Data Center</u> (SDC) is the software that JPC uses for cloud management. SDC is now an open source project.

- Used Confluence to create initial documentation for SDC 6.0 and SDC 6.5.
- For SDC 7.0 I migrated the documentation to <u>Kirby CMS</u>, GitHub, and Markdown to make it
  easier for engineering and support to add or to make changes to the documentation as the product
  was developed.
- Wrote tools in <u>node.js</u> to migrate the Confluence content to Markdown.
- Taught customer support team how to fork the documentation repository, make changes, and send pull requests.

#### Manta

Manta is Joyent's object storage and compute service.

- Wrote <u>tutorial introduction</u> to Manta that introduced customers to basic concepts, showed how to
  use the command-line interface, and described how to run jobs.
- Wrote reference documentation for Manta storage and Manta compute.

## Hewlett-Packard

Sep 2009 - Aug 2010

#### Contractor

Updated the Administrator Guide, Users Guide, and Installation Guide for the new version of HP's Email Archiving software for Microsoft Exchange (EAsE). The Administrator Guide is designed to help the Exchange server administrator set up the best strategy to archive email.

**▶ Cognex** Apr 1996 — Nov 2008

#### **Principal Technical Writer**

During the 12 years that I worked in Cognex's Technical Publications department, the company evolved and changed from a company that provided vision software to support its hardware offerings to a company that focused on software and low-cost sensors. As the company's products changed, so did its technical documentation needs.

I wrote API documentation for two major vision class libraries. The libraries had C++, C#, and Visual Basic interfaces. In addition to describing functionality, I wrote sample code in all three languages. I also wrote many of the tools that we used to generate the documentation in several formats.

<u>CVL</u> (Cognex Vision Library) is a large C++ class library made up of nearly 600 classes designed for OEM semiconductor inspection applications. My work on this library included:

- Documenting most of the early classes for various vision tools, image acquisition, and image display.
- Creating a tool to parse C++ header files to extract function signatures and generate ready-to-use

FrameMaker templates.

- Designing the layout and FrameMaker templates for the printed documentation.
- Writing a tool to help discover instances where developers had added new members to classes to
  make sure the documentation was up to date.

<u>VisionPro</u> is Cognex's flagship general purpose vision software product. It provides both an interactive development environment as well as a rich .NET-based vision library.

- I documented the API for most of the classes, and created examples and code snippets for most of the methods.
- Wrote conceptual documentation and how-to guides to help customers learn how to use and combine parts of the library.
- VisionPro was originally a COM product. With other members of the team, I wrote a set of tools
  that used reflection to generate base documentation from COM-based libraries. When VisionPro
  moved to the .NET architecture, I wrote tools to generate a new .NET version of the
  documentation and then keeping both the COM and .NET versions in sync. (The COM version was
  eventually dropped.)
- The COM VisionPro documentation source existed as a set of over 20,000 XML files. We wrote custom tools to generate CHMs for the VisionPro documentation. For the move to .NET, I adapted NDoc, an open source documentation generator, to use our legacy XML files as well as new C#-generated documentation XML files. We wrote tools to generate HTML, CHM, and HxS versions of the documentation.
- I optimized our build process so that we were able to build complete documentation sets in under an hour instead of three or four hours.

In addition to working on documentation for Cognex's vision software class libraries, I also wrote and maintained several tools used by both projects.

- I wrote an XML-based application to maintain release notes for both VisionPro and CVL. This
  application generated HTML for inclusion in customer documentation and another version for
  internal use. The internal version included links to the bug database, noted when a bug appeared
  and when it was closed, and could be use to generate historical versions of the release notes.
- I maintained a camera database that began as a simple table and later became an XML-based file similar to the release notes database. This became the single place where there was a historical record of which cameras were supported in which release of each software product. I taught myself MS Access and SQL to reimplement this application as an Access database and transferred responsibility of the database to engineering. The marketing department used this database to generate a list of compatible cameras on the Cognex web site.

Freelance Sep 1992 — Apr 1996

Designed and wrote documentation for several Macintosh software companies. Most of these were short-term contracts.

- <u>Metrowerks</u> Wrote cookbook for PowerPlant, the Macintosh application framework included with the CodeWarrior development environment.
- Bare Bones Software Wrote printed documentation for BBEdit and Apple Guide online help.

- Pacer Software Wrote documentation for Macintosh communications software.
- **Component Software** Wrote class library documentation for an early object-oriented C++ development environment.
- BBN Wrote documentation for Internet server administration application for a spinoff of BBN.
- Charles River Analytics Wrote end user manual for a <u>Macintosh intelligent assistant</u> that
  observed user actions and made suggestions for streamlining workflow.

## Symantec

Mar 1987 — Jun 1992

During this time, Symantec made the best-selling development tools for Macintosh computers. I contributed to virtually every area of software development through four versions of <a href="https://doi.org/10.11/10.11/">THINK C</a>, three versions of <a href="https://doi.org/10.11/">THINK Pascal</a>, and two versions of <a href="https://doi.org/10.11/">THINK Reference</a>. I held positions as Product Manager, Documentation Manager, Technical Support Manager, Quality Assurance Manager, and Technical Writer. I was usually in charge of at least two departments at the same time.

#### **Product Manager**

Mar 1990 — Jun 1992

- Responsible for all language products for the Macintosh: THINK C, THINK Pascal, and THINK Reference.
- Wrote initial business plans that included product definition, target customers, product positioning, and feature specification.
- Tracked development, set schedules, and made trade-offs to ensure on-time delivery of the products.
- Coordinated with other groups (manufacturing, international, marketing) so entire product team knew exactly where projects stood at all times.

### **Documentation Manager**

Mar 1989 — Jun 1992

- Responsible for all aspects of documentation: planning, scheduling, designing, and writing.
- Wrote first manual for the <u>THINK Class Library</u>, an object-oriented application framework. This
  manual included a highly praised introduction to object-oriented programming as well as an easyto-follow tutorial.
- Earlier, as a Technical Writer, solely responsible for the THINK C and THINK Pascal manuals. Wrote most of the tutorials (programs and text) used in the manuals.

#### **Technical Support Manager**

Oct 1990 — Nov 1991

- Managed three support engineers.
- Improved communication and cooperation among the support engineers and kept them informed on various projects throughout the division and the company.
- Shifted emphasis from call throughput to call quality and reduced customer complaints by instituting guaranteed callbacks by the end of the day.
- Integrated Zortech's four technical support engineers during the Zortech acquisition (9/91) into Symantec's support department. Trained new support manager.

#### **Quality Assurance Manager**

Sep 1989 — Oct 1990

- Set up improved bug-tracking system that made it easier for engineers to get information on problem reports.
- To ensure immediate feedback between QA and Development at the end of a product cycle, instituted a round of daily progress meetings.
- Moved responsibility for alpha and beta test program from marketing to QA department to make testing more effective without compromising alpha and beta testing as a useful marketing tool.

## Applied Expert Systems

Aug 1985 - Feb 1987

### **Software Engineer**

Responsible for maintaining several system modules of financial planning expert system software including: spreadsheet, backup/restore system, batch script module, file access modules, product installation and update installation system.

Completely redesigned and reimplemented the backup/restore system to improve reliability and flexibility. Served as System Group liaison to Customer Support Group.

Wrote and presented a course on the Xerox Interlisp Environment for non-Interlisp users, including user's manual, and a course on "Lisp Literacy" to make interaction between the Systems Group and Customer Support more effective.

## Warren E. Collins

Aug 1984 - Jul 1985

#### **Contract Programmer**

Designed and wrote several modules of a large Pulmonary Function Testing system for the IBM PC. Taught C to in-house programmers. Resolved design issues. Established guidelines for software version control and system generation. Maintained and documented project software library.

**Verbex** Feb 1983 − Jul 1984

## **Software Engineer**

Maintained and enhanced object-oriented editors of Speech Application Development System. Designed user interface for a screen-oriented symbolic debugger for TMS320 signal processing chip. Designed and implemented device-independent screen and keyboard modules and macro preprocessor for inhouse language.

## Computervision

Jun 1982 — Feb 1983

#### **Programmer**

Maintained and enhanced line editor, file manager, and software development tools. Implemented ANSI tape support.

# **Education**

#### **Brandeis University**

BA Computer Science, High Honors. Honors thesis was on text manipulation and representation of a hypertext system.