DOUGLAS F. J. DeJULIO

Home Address
5835 Nicholson Street
Pittsburgh, PA 15217
ddj@aisb.org

Experience   CARNEGIE MELLON   Pittsburgh, PA
April 2001–Present
Principal Software Engineer. I have been responsible for designing, building, and supporting a wide variety of software, systems, and services, mostly relating to the web. The lightweight web publishing system I designed in 2001, as my first major project in my current position, is still in use today. The system consists of a set of loosly-coupled components bound togeter by standard data formats and protocols, written in a variety of languages.

My first major Java project was a framework for building account and identity management applications for our help center. This involved writing a service provider against the JNDI SPIs, to make the difference between components that used and did not use Kerberos transparent to other developers.

I am the main architect and developer behind Carnegie Mellon's portal initiative (my.cmu.edu), which includes a self-service "dashboard" for members of the Carnegie Mellon community. It is also currently the technology platform for Carnegie Mellon's "public events" calendar (www.cmu.edu/events) and undergraduate admission web site (www.cmu.edu/admission). This was all built upon a Java-based JSR168/WSRP-compliant commercial portal product, which we then integrated with our infrastructure and services (such as single sign-on for authentication and custom LDAP directory information for identity and authorization) and then used for developing a wide variety of custom portlets.

When we had to rapidly internationalize our human resources system (due for example to our Australian, Japanease, and Qatari campuses), as one of the few outside developers on staff who was familiar with using embedded SQL in C programs, I was drafted into that effort, joining the team that made this conversion a success.

When the university decided to implement an opt-in mechanism for emergency notification for students, I was selected to lead the technical implementation. We built a custom portal backed by a simple database for opting-in, and a separate middleware component that merged the opt-in data with demographic information from our directory (LDAP-based) and performed the synchronization with the third-party service vendor that sends the notifications on our behalf.

I have assumed a technical advisory role on the project to deploy an Enterprise Service Bus as a component of Carnegie Mellon's middleware infrastructure.

During my time at Carnegie Mellon, one consistent piece of feedback I've consistently received is that I boost the productivity of my co-workers to a much greater degree than is typical.

RED HAT   Durham, NC
January 2000–April 2001

At Red Hat my duties have been to maintain, support, and enhance the CCVS financial transaction processing product. I have gone overseas, to investigate the possibilities of extending CCVS to function with European financial institutions. I have worked with members of Open Source projects (PHP4, Akopia Interchange) to add support for CCVS to those projects. I have continued to provide technical support to CCVS users. I have also continued to attend conferences, to promote our product and company.

HKS.NET   Pittsburgh, PA
July 1996–January 2000

Senior Developer for application and systems programming, and System Administrator for all Unix systems. I was hired because of my extensive experience programming in C on Unix. I was the primary system architect and developer for HKS's flagship software product, CCVS. As we added engineers, my role changed from sole engineer to the leader of a technical team.

I was also responsible for CCVS technical support. Since CCVS as a product is often tightly integrated with various other systems, this often involved debugging, diagnosing, and helping to fix a wide variety of software systems.

I also attended the technical conferences at which we had a booth presence, educating people about and promoting our product and company.

In my System Administrator role, I maintained a heterogeneous environment of Unix servers, including systems running Solaris, AIX, SCO OpenServer, several varieties of BSD, and several varieties of Linux. I managed our network infrastructure (T1 line connected to UUnet via Cisco router) and services (NFS, NIS, SMTP/IMAP/POP mail, NNTP news, DNS, and so on). I also set up and managed our various web servers, including our secure site using an SSL web server.

I was with the company up to our acquisition by Red Hat in January of 2000, at which time I became an employee of Red Hat.

UNIVERSITY OF PITTSBURGH   Pittsburgh, PA
November 1995–June 1996

Systems Analyst for Computing and Information Services. I was hired primarily for Unix programming and administration expertise. My duties included: debugging, release of and support for various Unix commercial packages in an AFS environment; technical support for World Wide Web services; and participation in Pitt's transition to an IMAP-based email system.

May 1994–November 1995

"Apprentice Systems Analyst" for the CIS Technology Evaluation and Consulting

Lab. In this lab, advanced technology was evaluated, and we consulted with end-users regarding how to make use of it. Technologies I helped evaluate included CD-ROM recording, digital video processing, and color image input and output (scaning, printing, outputing to 35mm film). I also participated in and occasionally ran specialized training sessions on such topics as web authoring and multimedia data presentation, and prepared documentation on various topics.

CARNEGIE MELLON   Pittsburgh, PA
August 1992–March 1993
Systems Programmer for Carnegie Mellon's ATK Consortium.

CARNEGIE MELLON   Pittsburgh, PA
May 1990–July 1992
Research Systems Programmer working on Carnegie Mellon's "Project Mercury" library automation project. I specialized in database work, building the back-end databases for the library system, and producing specialized tools to make it easier to work with them.

1986–1990
Student User Consultant, specializing in Unix, IBM-PCs and database work. My responsibilities included providing user support for the Carnegie Mellon user community and developing and maintaining a database of all of the hardware managed by Academic Computing.

KELLEY TEMP SERVICES   New York, NY
Summer 1986
Temporary Secretary specializing in IBM-PC word processing applications, working for CitiCorp's Corporate Trust department. I also provided some general PC user support.

Skills

I am extremely proficient in C and in various Unix environments, having well over ten years of practical experience in many varieties of both.

In my capacity as a Unix system administrator, I have built firewalls, mail servers, news servers, database servers, file and print servers for desktop systems, and custom web servers.

In my capacity as C programmer, I designed and implemented a succesful piece of commercial software (CCVS) that has been available on the market for a variety of Unix platforms for several years.

I am familiar with TCL/Tk, Objective-C, and Perl, and the various Microsoft Windows environments (including NT on non-Intel platforms), as well as several dialects of SQL. I am also familiar with C++ and Java, and the Macintosh Operating System. I have done small amounts of assembly language programming for the i86, Z80 and m68k, and have dabbled in the PDP-11, VAX and Alpha processors.

Education

UNIVERSITY OF PITTSBURGH 1994–1996
Worked towards a B.S. degree in Computer Science. I alternated between full-time and part-time school, and was hired by HKS before graduation.

CARNEGIE MELLON   Pittsburgh, PA
1986–1994

Worked towards a B.S. degree in Chemistry with a concentration in Biochemistry.
I alternated between full-time and part-time school, and transferred to U. Pitt and
changed major before graduation.

STUYVESANT HIGH SCHOOL   New York, NY
1982–1986

Studied under a science/math program which included several computer related
courses, such as a year-long CAD/CAM course and a semseter long course in C
programming.

Other Experience

I have owned and operated a LAN in my home, as a hobby, since about 1988.
The cluster has, at various times, included several Unix workstations, some VMS
workstations, some PDP-11s, some Macintoshes and some IBM-PC compatible
machines (including Windows NT servers). The Unix workstations alone have
included a set of old Sun2s, a NeXTstation, various SPARC systems, and a DEC
Alpha. Today, we have a Debian Linux server as our outward-facing "front end",
with MacOS behind our firwall serving in a "workgroup server" role.