Andi Miller

West View Cottage
Upperton
Petworth
West Sussex
GU28 9BE

Phone: 07837 429193
Email: andi@andimiller.net
IRC: Sylnai@irc.freenode.net
Homepage: andimiller.net
Portfolio: https://github.com/andimiller/

SKILLS AND EXPERIENCE

LANGUAGES

Scala	My current day to day language, both in a Java interoperable style, and in a functional style.
Java	I am familiar with using Java in large teams, and used it for multiple projects at DataSift.
C	Covered during my degree, wrote patches for OpenSIPS and Asterisk while at Gradwell.
Python	My old main language, wrote a lot of personal projects in it including pizza-auth, a large scale LDAP user management tool for EVE Online alliances.
C#	Learnt while at College, used for many personal projects including a network monitor, a few small games, some of which had network capabilities.
PHP	Maintained old PHP webapps at Gradwell and DataSift, using it for some of my own sites too.

TECHNOLOGIES

Large Stream Processing	Have real world experience building scalable stream processing systems with technologies including Kafka, zeromq and redis at DataSift.
Big Data	I also have experience with Hadoop and ELK for storing and indexing large datasets.
Parallel Programming	I enjoy writing parallel processing jobs, and have used python, Hadoop and spark for it.
Scalability	I enjoy architecting systems which can scale, this was our primary feature when building systems at DataSift.
Language Development	Have implemented domain specific languages using both ANTLR and flex/yacc.
Metrics	A habit I got into at DataSift, I tend to add metrics to everything I write and aggregate them in graphite, grafana or riemann, I really like having a central dashboard with full statistics available on deployed applications.
Network Protocols	Have implemented a variety of protocols in many languages, including IRC, HTTP, FTP and NTP.
Server Admin	Have experience with managing many types of servers, including various Linux and BSD distributions, and Windows Server. Also maintain my own virtual and physical servers for my own projects and online game groups I play with.
Typesetting	Writing up many project reports, and this CV in LaTeX. I have also written a couple of LaTeXto HTML converters.
UNIX and Linux	After using *NIX systems for many years, I am more than competent at administering systems running a *NIX-like Operating System.
Version Control	When coding I've used lots of Version Control systems, including SVN, Git, Mercurial and Bazaar.
Virtualization	I maintain a set of Virtual Machines for testing personal projects, and have experience administering KVM and OpenVZ clusters.
Web Development	I maintain multiple websites in my spare time, and am familiar with modern web development practices including HTML5, CSS, Websockets and Scala.js.

EDUCATION

B.Eng. Software Engineering, Aberystwyth University, 2009 - 2013.

2:1, just below a First
Averaged over 70% in core Programming modules.
did Artificial Intelligence modules

Alton College, Alton, Surrey 2006 - 2008

A-Levels: Further Maths - C, Maths - A, Physics - B, Computing - A.
AS-Level: Electronics - B.

EMPLOYMENT

Software Engineer, DataSift (MediaSift Ltd.), June 2013 - Present

Worked in an agile team developing Scala microservices.
Practiced agile test driven development in a team.
Developed and maintained an in-house Domain Specific Language for transforming JSON
Maintained client-facing API libraries and their documentation

VoIP Engineer, Gradwell dot com Limited, June 2011 to July 2012.

Maintained and made improvements to one of the largest award-winning Open Source VoIP stacks in
the UK.
Regularly worked with both Support and System Administration departments.
Worked in a variety of languages, including Perl, C, Python and Ruby.
Worked in an engineering team using Jira and Mercurial.

Freelance Coder (Google Summer of Code), Google, Summer 2010.

Worked to a strict deadline
Integrated into the community
Learned many new technologies, including:
DBus
GTK
Bazaar

REFERENCES

Available on request.