Paul Howe

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Experience

Pandora — pandora.com

Oakland, CA: Engineering Manager - Analytics (July 2016 - Present)

- Hadoop
- Hive
- Java
- Postgres
- Scala
- Spark

SocialCode — socialcode.com

San Francisco, CA: Sr. Engineering Manager (July 2013 - July 2016)

Analytics team engineering manager. The analytics team works to develop novel, industrial strength analytical models and services. The analytics team interfaces closely with product, reearch and platform development teams.

- AWS: EC2, Elasticsearch, Elastic MapReduce, Redshift, RDS
- Celery
- Chef
- Django
- Docker
- Grafana
- Jenkins
- Kibana
- MySQL
- Python

Forio Online Simulations — forio.com

San Francisco, CA: Software engineer (November 2011 - June 2013)

Developed an online educational simulation in collaboration with Harvard Business School designed to teach concepts in venture capital and private equity portfolio management.

- AWS: EC2
- Java
- MongoDB
- JRuby
- ZFS

SimplyHired — simplyhired.com

Mountain View, CA: Contract software engineer (August 2010 - June 2011)

Developed a high performance email delivery system in Python to support the promply delivery of email job alerts. The alerts delivery service was responsible for processing ~750k emails/hr.

- Multiprocessing
- Python

SplinkMedia — splinkmedia.com

San Francisco, CA: Lead developer (April 2009 - April 2010)

Lead developer for the social media startup, SplinkMedia.com.

- Django
- Git
- Javascript
- Linux
- Memcache
- Nginx
- Postgres
- Python

Yahoo! — yahoo.com

Sunnyvale, CA: Software engineer (September 2007 - April 2009)

As a member of the personalization gcing team I participated in platform development on a distributed database responsible for storing profile data for several highly trafficked sites at Yahoo. Contributed to several internal and external web applications.

- PHP
- MySQL
- Javascript
- C++

Acxiom Digital (formerly Kefta) — acxiom.com/digital-impact

San Francisco, CA: Software engineer (March 2006 - September 2007)

Acquired by Acxiom Digital (April 2007)

Developed client campaigns on the Kefta web services platform. Developed marketing campaigns for several high traffic fortune 500 websites.

- Python
- Oracle
- Solaris
- Javascript

Berlitz — berlitz.com

Brno, Czech Republic: English teacher (October 204 – October 2005)

Brno Language School, Czech Republic

CT Diagnostic Imaging Center

Madison, WI: Web developer (March 2004 - May 2004)

Designed and Developed web site for the University CT Imaging group.

Environmental Remote Sensing Center — www.ersc.wisc.edu

Madison, WI: Web developer & assistant systems administrator (December 2001 to May 2004)

Developed a web site to serve daily MODIS satellite imagery for the state of Wisconsin. Also Assisted in software maintenance and Unix system administration.

Education

Open online courses

Introduction to Apache Spark

An online course covering the fundamentals of Apache Spark with exercises in PySpark developed in Databricks hosted Spark notebooks.

Course details: Spark is rapidly becoming the compute engine of choice for big data. Spark programs are more concise and often run 10-100 times faster than Hadoop MapReduce jobs. As companies realize this, Spark developers are becoming increasingly valued.

This statistics and data analysis course will teach you the basics of working with Spark and will provide you with the necessary foundation for diving deeper into Spark. You'll learn about Spark's architecture and programming model, including commonly used APIs. After completing this course, you'll be able to write and debug basic Spark applications. This course will also explain how to use Spark's web user interface (UI), how to recognize common coding errors, and how to proactively prevent errors. The focus of this course will be Spark Core and Spark SQL.

This course covers advanced undergraduate-level material. It requires a programming background and experience with Python (or the ability to learn it quickly). All exercises will use PySpark (the Python API for Spark), but previous experience with Spark or distributed computing is NOT required. Students should take this Python mini-quiz before the course and take this Python mini-course if they need to learn Python or refresh their Python knowledge.

University of San Francisco - usfca.edu

San Francisco, CA: Masters in Computer Science (August 2008 – May 2012)

Coursework and Research

- Advanced Microcomputer Programming
- Artificial Intelligence
- Autometa Theory
- Bioinformatics
- Distributed Software Development
- Network Queueing Theory
- Operating Systems
- Security & Privacy
- Web Systems & Algorithms

Lawrence Livermore National Laboratory — llnl.gov

Livermore, CA: Research internship (November 2010 - November 2011)

Participated in an internship at Lawrence Livermore National Labs to facilitate the testing and analysis of supercomputer performance modeling.

- MPIP
- Network Queuing Theory

University of Wisconsin-Madison — wisc.edu

Madison, WI: Bachelors of Computer Science (May 2000 - May 2004)

Coursework

- Algorithm Analysis
- Artificial Intelligence
- Compilers, Object Oriented Development in Java
- Machine Organization & Digital Systems Fundamentals
- Programming Language Design
- Programming Language Theory (C, C++, Java)

Previous university coursework

Rochester, MI; Royal Oak, MI; Detroit, MI (1998 - 2000)

- Oakland University — oakland.edu
- Oakland Community College — oaklandcc.edu
- Wayne State University 1998 — 2000 wayne.edu

Coursework

- Introduction to C++
- Network Programming in C

Publications & documentation

- MPIP supercomputer performance modeling research project documentation
- Near Real-time Internet Delivery of Processed MODIS Imagery in Wisconsin [Paper][Citation]

Achievements

Winner of "Hacks / Hackers" 48 hour iPad application development competition sponsored by KQED for entry "Who's reppin me?", May 2010

Honors & scholarships

- 2012 USF Computer Science department fellowship award
- Scholarship to Grace Hopper Celebration of Women in Computing Conference 2010

Presentations

Supercomputer Performance Modeling Poster Presentation at the 12th Celebration of Student Research and Artistic and Scholarly Creative Activity (April 12 2011) Advising Professor: Jeff Buckwalter

Technologies

- Django
- Java
- Javascript
- Node
- Python
- Rails
- Ruby
- SQL (MySql, Postgres)