

MAX PARKER-SHAMES

email max@maxps.org
url www.maxps.org

Experience

ECM Technology Intern, Liquidnet Holdings Inc. NYC 2012

Worked to bring an early prototype of a multi million-dollar web application involving private shares to market. Designed and implemented significant portions of internal and client-facing codebase as part of the small agile Equity Capital Markets team.

Node.js, coffeescript, Grails, Oracle databases, MongoDB

System Administrator, University of Chicago CS Department Chicago, IL 2010-2013

Maintained the University of Chicago's primary lab of Macintosh and Linux server and desktop machines, engineered custom software packages, assisted users of the lab in performing a variety of computer-science related project and course work.

Bash, Lisp, Python, PHP, MySQL

Software Engineer, Tree Star Inc. Ashland, OR & Chicago, IL 2009-2012

Designed, implemented, and deployed a novel 3D multidimensional visualization system for research and medical Flow Cytometry data analysis as part of the industry-leading FlowJo software package. Pioneered machine learning and automated analysis platforms for high-dimensional scientific data sets, to be used in future medical flow cytometry-based diagnosis applications. Crafted documentation and training materials for teachers and students in a course to engage public High School age students with HIV/AIDS researchers doing cutting-edge research.

Java, Matlab, C++

TA, University of Chicago CS Department Chicago, IL 2011-2013

Acted as a teaching assistant and grader for the honors introduction to computer science course at the University of Chicago, covering algorithm design, program implementation, and general good software design practices. Part of a team responsible for grading student work, assisting students with finding problem solutions, and interacting with graduate instructors and the professor. Created internal automated grading and student management tools to assist in these functions.

Python, Bash, C

Founder, HTMLFactory.com Chicago, IL 2007-2013

Designed websites for businesses and organizations. Responsible for design coordination for websites, mobile applications, and branding services. Responsible for front and back-end coding and development, systems integration, and standards compliance.

HTML, CSS, Javascript, PHP, MySQL

Intern, Open Door Networks, Inc. Ashland, OR 2007-2009

Engineered custom software applications to monitor network use on a small ISP backend network. Performed bug fixing, stress, and intrusion testing on developmental security software (later licensed for incorporation into the Norton Internet Security Macintosh Firewall). Pioneered and implemented a computer loaning and internet access program for low and reduced income students and their families. Assisted in the development of several early iOS applications as part of the artauthority.net collaboration.

Applescript, Bash, Objective-C

Education

University of Chicago, Chicago IL : 2013

– Computer Science BS (focus in Advanced Programming and Systems design)

Ashland High School, Ashland, OR : High School Diploma, 2009

Skills

Experienced in C, Node.js (javascript), Matlab, Java

Proficient in Objective-C, C#, C++, Python, Haskell, Shell Scripting, Applescript, awk, sed, bison, , Mathematica, Ruby on rails, Django

Experience with embedded microcontroller design (hardware and software)

Experienced in Database design (MySQL, SQLite), Web Design-- HTML, CSS, Javascript (Custom libraries, JQuery, Mootools), PHP

Outstanding written and spoken English, conversational spoken and written Spanish.

Expert level user of Macintosh OS 8 - 10.8

Experienced Linux (Debian, Ubuntu) Systems User

Expert level user of all MS Office applications

Additional Proficiency: networking, video production (digital and analog systems), robotic systems (pneumatics, electrical engineering, embedded system programming).

Activities and Interests

Member of the Association for Computing Machinery, Casual musician (Violin, Piano, Voice, Guitar), Interests in Machine Learning, Big data, Quantitative Finance, Data Visualization

References available upon request