John R. Ailor
Full-Stack Developer

To Whom it May Concern,

      Please find enclosed my resume, which outlines my relevant experience for this position, as well as my education. I recently graduated from Drexel University in Philadelphia, with a degree in Computer Engineering. I have gained over six years of experience working with a full stack of web technologies and software development. I have gained a great deal of experience writing technical reports, and documentation. I believe that one of my strengths is the design and implementation of software solutions. I am quick to learn new skills in any position, and enjoy learning new languages, libraries, or frameworks; if you do not see a technology that you work with on my resume, I will be more than willing to learn how to use it.

      My previous experience has been focused on server-side technologies, including HTTP based requests. My focus on Server-side technologies has given me the ability to work with a variety of languages, including C++, php, Python, and Node.js. I have also worked extensively with Amazon Web Services, including installation of languages, Web-servers, and database systems. I have had the pleasure of working with a large number of SQL and NoSQL database in the position that I have held in the past, and look forward to the opportunity to work with more. I believe that any team I am given the opportunity to work with will find that I am a dedicated employee who looks for the best solution to any problem.

Sincerely,

John Ailor

Key Competencies:

Languages:

C++, Python, php, Java, JavaScript (ES5/ES6, node.js), Ruby, C, C#, ASP.NET MVC, Awk, Lisp, Octave, VB, VHDL

Databases:

Mongodb, MySQL, Neo4j, PostgreSQL, Microsoft SQL Server

Markup/Style:

Multi-Markdown, HTML5, LaTeX, CSS3, Bootstrap, Sass, LESS

Software/Applications:

MS Visual Studio, Git, Netbeans, AutoCAD, Sketchup, LabView, MS Office Suite with VB Macros, MATLAB, Hadoop, Spark, Linux (Bash), Vim, Eclipse, Unity, Unreal

Libraries:

Express.js, Forever.js, Socket.io, Socket.io-client, serialport2.js, hapi.js, happy.js, BeautifulSoup (Python), jQuery, jQuery-ui, Flask (Python), Google Maps Javascript API, Ramda.js, Most.js, Django

Integration Testing:

Selenium, nightwatch.js, webdriver.io

Education

Bachelor of Science, Drexel University   Philadelphia, PA, **06/15**
   Major in **Computer Engineering**
   Minor in **Electrical Engineering**
   Minor in **Business Administration**

Experience

URBN Inc   **08/15 - Present**
Software Developer

- Worked with small team to build and launch a new brand website; now handles about 4 million monthly visitors
  - Utilized Node.js and Hapi.js web-framework to interactive with API services
  - Harnessed the power of ES6 and functional programming (Ramda.js) to develop rich user interfaces
  - Developed using stream based events (most.js) to handle event based programming paradigms
  - Used LESS based CSS pre-compilation to style and format client facing website
  - Successfully launched website globally at beginning of April 2015, and stayed with team for maintenance till month's end
- Worked with a team of developers to build a product management system to be used with multiple brands; collectively handling about 26 million monthly visitors
  - Worked with Oracle/Django/jQuery to build an interactive system to manage products for microservices architecture
  - Converted all ES5 code to ES6 and updated HTML templates for re-use-ability
  - Used Python services to migrate legacy product data to new system
  - Used SASS based CSS pre-compilation to style and format internally facing website
  - Successfully launched new product management system to internal clients in August 2015, stayed with team for maintenance and feature improvement
- Re-imagined and rebuilt the e-commerce promotion and coupon management suite
  - Coordinated with e-commerce merchandisers to develop requirements
  - Designed import and export algorithms for various message consumers
  - Prioritized and managed distribution of development resources to ensure timely project completion

Philadelphia Game Lab   **01/14 - 08/15**
Information Lead / CIO

- Worked to deploy and develop on AWS EC2 Linux and S3 instances
  - Completed numerous installs of C++, Node.js, php, Apache httpd, Mongo and other software
  - Developed HTTP scripts in C++, and php, as well as programs in C++, Python, and Node.js
  - Enabled real-time requests for gaming and live applications in Node.js
- Managed a team of eight programmers and a graphic artist through several projects
- Pitched my software architectures successfully to clients, investors, and technology partners
- Worked with CEO to manage day to day operations of company and personnel management; including hiring 20 new employees
- Oversaw design and execution of several client and in-house projects
- Worked with Unity, Unreal, and Oculus Rift for a temporary interactive installation

SAP America   04/13 - 09/13
Global Customer Operations Co-Op
- Worked with a design team to build a cross platform mobile theme in CSS and JS which was deployed to internal teams (SAPUI5)
- Coordinated with numerous departments to gather requirements and develop internal department pages (SAP Portal)
- Worked to build and update department specific pages on the SAP internal social network (SAP JAM)
- Trained business users in the use of HTML for the basic purpose of intranet editing in order to ensure continued maintenance of system content

National Board of Medical Examiners   04/12 - 09/12
Internet Services Co-Op
- Maintained multiple external and internal applications
- Integrated updated intranet with existing version in order to ensure compatibility with Microsoft SharePoint
- Designed and organized layout of new and existing web pages built on ASP.NET VB and Microsoft SharePoint
- Worked to modernize CSS and JS on existing applications

Campus Apartments   09/10 - 04/12
Web Technologies Associate
- Converted Database centric proprietary Rental Management System and Tenant portal from ASP.net 1.1 to 4.0 utilizing code behind and Master Pages in VB and C++
- Simultaneously updated database from SQL Server 2000 to SQL Server 2008 and standardized table and stored procedure naming conventions
- Photographed buildings and edited images in Photoshop in order to further renters' interest
- Helped introduce semi-agile work-flow with focus on pair-programming using VisualSVN for Visual Studio

MyOhMy Design and Build   09/09 - 06/15
Co-Founder / CIO / Lead Digital Modeler
- Innovated 3D modeling process, using CAD software, resulting in a sustained national commercial endeavor
  - Acquired 50+ nation wide clients specializing in off-campus student housing in 15 states
  - Out bid multiple outsourced companies providing similar services in order to secure repeat business
- Rendered 3D Models to create photo-realistic images for marketing purposes
- Collaborated with property managers/owners and on-site personnel to ensure model accuracy
- Expanded process to meet market needs and developed a staff to meet demand as business expanded
  - Developed numerous proprietary software packages to be used in modeling processes, including model mapping technologies in Ruby, C++, and Java
- Migrated a ASP.NET MVC website from rackspace hosting server to an AWS EC2 instance for a non-profit organization

Projects

Unmanned Ground Vehicle   09/14 - 06/15
SMARTBoard Controlled Ground Vehicle for Radiation Detection
- Developed a Ground Vehicle on top of Raspberry Pi and Arduino with attached sensors using C++, Python, and Node.js
  - Geiger Counter for Radiation Detection
  - GPS Sensor and Altimeter for location tracking
  - 3 motors for steering and control
- Developed SMARTBoard interface in HTML5 and CSS3 with Bootstrap and Google Maps Javascript API
- Built custom server-side software in Python and Node.js to facilitate communication between SMARTBoard and Unmanned Ground Vehicle
- Collaborated with a short-range rocket development team to increase scope of radiation readings, communicating through a custom Python API.

Robotics Simulation   09/13 - 12/13
Microsoft Visual Simulation Environment
- Used MS Visual Simulation Environment to simulate over 100 differential drive robotic entities
- Worked with C# and MVSE API to communicate with simulated robots via Microsoft CCR
- Generated 3D map environment from static images for simulated robots to interact with other simulated robots

Java Simulation   09/12 - 12/12
Disease Spread Through Simulated Urban Environment
- Researched disease characteristics and statistics in order to create an accurate representation of the environment
- Used Object-Oriented programming to implement companies, families, schools, people, and public transportation
- Monitored the spread of disease starting with patient zero parameters by using a variety of data structures
- Analyzed results using Excel and Excel VB Macros by comparing generated data to real-world disease spread data, as well as existing models

Activities

National Organization for Business and Engineering   2012 - 2013
National Technology Chair

Math Student Organization   2012 - 2013
Website Management Chair

National Organization for Business and Engineering at Drexel 2011 - 2012
Technology Development Chair