

# John R. Ailor

SOFTWARE ENGINEER · FULL STACK DEVELOPER

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## Experience

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### URBN Inc

<http://www.urbn.com/>

#### INTERNAL SERVICES ENGINEER

2016-06-01 / Present

- Principal front-end engineer and back-end developer for internal services and business tools team
- Architected and implemented a replacement for legacy promotion pricing system (Oracle ATG) utilizing Python and MongoDB
  - Worked with several senior architects to design a system based on factory patterns compatible with all existing promotions
  - Collaborated with business users to ensure that all current and future promotion scenarios are properly handled
  - Designed new regression and integration testing procedures to drive development and ensure compatibility with existing systems
- Moved existing product browse and search services from third-party service to in-house Elasticsearch service
  - Collaborated with a small team of developers to build product search and browse endpoints in GoLang
  - Programmed in GoLang to create a queue ingestion service to continually populate Elasticsearch data
  - Used Python and Node.js to create data migration scripts from legacy system to new Elasticsearch service
- Developed a Django based catalog management tool for internal website merchandising and web production
  - Built on an Oracle DB backend using Django ORM and view management and custom SQL procedures
  - Designed and implemented extensive interactive user interface in jQuery and Sass to meet the needs of brand users
  - Integrated with external catalog management tool intended to facilitate the sale of third-party products
  - Ensured consistent automated integration tests using Selenium, and webdriver.io
- Re-imagined and rebuilt the e-commerce promotion and coupon management suite with interactive JavaScript UI
  - Coordinated with e-commerce merchandisers to develop requirements and simplify promotion creation procedures
  - Designed import and export algorithms for various AWS SQS message consumers
  - Prioritized and managed distribution of development resources to ensure timely project completion

### Free People

<http://www.freepeople.com/>

#### NODE.JS ENGINEER

2015-08-20 / 2016-06-01

- 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 interact with API services from Node.js
  - Harnessed the power of JavaScript 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

### Philadelphia Game Lab

<http://philadelphiagamelab.org/>

#### INFORMATION LEAD / CIO

2014-01-14 / 2015-08-13

- Worked with CEO to manage day-to-day operations of company and personnel management, including hiring 20 new employees
- Managed a team of eight programmers and a graphic artist through several internal and client projects
- Pitched my software architectures successfully to clients, investors, and technology partners
- Worked to deploy and develop various projects on both AWS EC2 Linux and S3 instances
  - Completed numerous installs of C++, Node.js, php, Apache httpd, Mongo, and other software on AWS EC3 instances
  - Developed HTTP scripts in C/C++, and php, as well as programs in Python, Java, and Node.js
  - Enabled real-time requests for gaming and live applications in Node.js
- Worked with Unity, Unreal, Arduino, and Oculus Rift for a temporary interactive installation
- Analyzed client data sources using scripts written in Awk, Perl, Lisp, and Node.js

## MyOhMy Design and Build

CO-FOUNDER / CIO / LEAD DIGITAL MODELER

2009-09-01 / 2015-06-15

- 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 using custom built rendering farm on cloud architecture
- 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

## SAP America

<https://www.sap.com>

GLOBAL CUSTOMER OPERATIONS CO-OP

2013-04-01 / 2013-09-25

- Worked with a design team to build a cross-platform mobile theme in CSS and JavaScript, 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

<http://www.nbme.org/>

INTERNET SERVICES CO-OP

2012-04-01 / 2012-09-25

- Maintained multiple external and internal web applications with a small team of developers
- 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 JavaScript of existing applications

## Campus Apartments

<http://www.nbme.org/>

WEB TECHNOLOGIES ASSOCIATE

2009-10-01 / 2012-04-01

- 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, standardized table and stored procedure naming conventions
- Photographed buildings and edited images in Photoshop in order to further renters' interest
- Helped introduce semi-agile workflow with focus on pair programming using VisualSVN for Visual Studio

## Education

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### Drexel University

Philadelphia PA

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

2010-09-20 / 2015-06-15

- Major in Computer Engineering
- Minor in Electrical Engineering
- Minor in Business Administration