



skills //

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|------------------|------------|-------------------|-----------------|----------|----------------|
| Node.js | PostgreSQL | OpenResty / NGINX | PhantomJS | Selenium | Asterisk |
| Lua | MySQL | HTML5/CSS3 | Browser Plugins | JIRA | VoIP |
| PHP | MongoDB | jQuery | UI/UX | Git | SmartOS |
| Python | Redis | Knockout.js | Compass/SASS | Chef | ArcGIS |
| JavaScript (ES6) | Koa | Grunt | Bootstrap | AWS | Virtualization |



experience //

SENIOR ENGINEER

JARVUS INNOVATIONS / SLATE FOUNDATION // 2015 - PRESENT

- Implemented a Node.JS module that streams real-time database changes from MySQL, PostgreSQL, MongoDB and Redis using their built-in replication protocols for low-latency and minimal overhead.
- Moved sessions and authentication into NGINX (OpenResty) allowing stateless microservices to trust incoming connections.
- Engineered a polyglot stack with multiple databases and languages with both strong and eventual consistency as needed.
- Developed a hybrid approach to event sourcing using temporal relational tables to minimize data loss during conversion to an append-only data schema.

SOFTWARE DEVELOPER

COREDIAL // 2013 - 2015

Designed and developed "click-to-dial" plugins for Chrome, Firefox and Safari:

- Implemented non-destructive phone number tagging in dynamically loaded content and nested iframes.
- Created Grunt tasks to automate build, packaging and development workflows for each browser.
- Abstracted away differences in browser APIs by implementing an event hub in < 1KB of compressed code.
- Engineered a solution to sign Safari packages on Linux.

Worked on a team of 10 developers to convert a 350 screen legacy PHP app in 6 months:

- Developed a real-time call center dashboard using XMPP, Knockout.js and jQuery.
- Tasked with converting the most visited screens in the web app including: login, home and dashboard.
- Modernized the orders and proposals workflow which is critical for revenue generation.
- Created reusable UI widgets and JavaScript components to rapidly implement new features globally.

CONTRACT DEVELOPER

JARVUS INNOVATIONS // 2014 - 2015

- Automated export of student grades from a legacy ASP.NET application using PhantomJS and Node.js.
- Integrated with Google Apps for SSO and syncing of local users and groups using OAuth2.

DIRECTOR OF DATA & ACCOUNTABILITY

STRING THEORY SCHOOLS // 2012 - 2013

- Saved \$300,000 in first year infrastructure costs by engineering an open source networking stack.
- Created a responsive mobile lottery application form with real-time analytics and IE6 support.
- Engineered a web content filter for 1:1 iPad deployment at 1/10th the cost of comparable solutions.
- Automated Google Apps administration using Python, Selenium and Node.js where Google's API fell short.
- Migrated legacy systems to LDAP with custom schemas to provide SSO. (Python, Atlassian Crowd)

SOFTWARE DEVELOPER

HOUSEFIX // 2011 - 2012 // CONTRACT

- Compiled a nationwide database of home improvement contractors with 99% accuracy.
- Created a client-side help system that generates "point-in-time" help omitting steps already taken.



volunteer //

TEAM LEADER / HEAD DEVELOPER

PHILLY TECH CAMP // 2013

School closures meant students were walking farther to school through unfamiliar areas. I created SafestWay, an app that routes around incidents of crimes to provide safe walking routes.



education //

COLLEGE

WEST CHESTER UNIVERSITY // 2012

Major: Business Administration
Minor: Business Geography (GIS)
Credits Remaining: 18
GPA: 3.33