Joel Mellon

Software Engineer

Skillset

Linux

- Alpine, Debian, Fedora
- Containerization
- Shell scripting (bash, zsh)
- Cron, Supervisord

Apache & nginx

- .htaccess
- mod_rewrite
- VirtualHosts
- Load balancing & reverse proxies

Databases

- MySQL, Aurora
- Elasticsearch
- MongoDB
- Redis

PHP

- Object Oriented Prog.
- MVC architecture
- Laravel, Zend, Yii
- TDD & BDT, PHPUnit

HTML & CSS

- HTML5
- SASS, SCSS & similar
- W₃C standards
- Bootstrap 4+

JavaScript

- Vue.js, React.js, Node.js
- ES5, ES6, JSX
- DOM scripting
- XMLHttpRequest (AJAX)

Possesses 15+ years of experience in various areas of software development, including a concentration in client- and server-side web programming and related technologies. Designs and supports web-based applications in Linux development environments.

Lead Software Engineer - Web

Relevant Experience

Blast Motion — Carlsbad, CA 2019–Current

- Served as the development team lead for the industry-leading athletic motion analysis company serving top-tier universities, PGA Tour golfers, and MLB championship teams.
- Collaborated with DevOps and cloud engineers to design and rollout a full infrastructure migration to Amazon Web Services, transitioning from limited vertical scaling capabilities to a horizontally scalable cloud architecture Terraform, Kubernetes, EKS, containerd, S₃, RDS
- Introduced a progressive delivery, GitOps oriented development workflow to reduce environment related issues, ensure code quality, and automate zero downtime deployments GitLab CI, JIRA
- Spearheaded an engineering initiative to improve front- and back-end performance across a wide spectrum of the development stack, earning substantial performance gains in metric delivery to consumers xhprof, Elasticsearch, MySQL, Laravel Queues & Event-based design patterns
- Custom coded graphs and charts to aid athletes and trainers in visualizing performance and to communicate effective strategies for athletic improvement Vue.js, Vuex, AmCharts
- Worked extensively with product, project, and program management teams to organize and plan deliverables, define consistent and centralized business rules, and ultimately shape the success of the product.

Software Architect

Stealth Startup (Contract) — Carlsbad, CA 2018–2019

- Architected micro-service oriented APIs using RESTful concepts Laravel, Lumen
- Extended Laravel Queues to manage asychronous, sequential operations and supervise task workers Illuminate, Supervisord
- Coded back-end components to allocate virtual hardware resources employing blocking techniques to prevent resource misallocation VMware, Vagrant
- Championed a unit testing culture, contributed expertise into CI/CD practices, and implemented product management workflows PHPUnit, GitLab, JIRA
- Mentored junior developers and QA engineers, and served as a bridge between department heads while working closely with company principals.

DevOps

- Kubernetes
- Docker, containerd
- AWS (EKS, EC2, RDS, ELB)
- GitLab & GitHub CI/CD

Python

- Flask RESTful
- SQL Alchemy

Security

- XSS, CSRF
- Session Hijacking
- SQL Injection
- Cryptography

Senior Software Engineer

Lettuce Box, Inc. — Carlsbad, CA 2017–2018

- Hand-wrote geospatial and temperature analysis algorithms integral to the real-time telemetry processing of millions of data points per hour PHP (Yii2)
- Orchestrated the automated deployment and scaling of a containerized task queue subsystem responsible for batch processing across dozens of worker nodes Docker, Amazon EC2
- Implemented build systems for automated testing in a continuous integration environment Drone.io, GitHub, PHPUnit
- Co-wrote and published a cross-platform, API-based mobile app for Android and iOS — React Native, Redux, React Router
- Employed Agile methodologies to lead project development JIRA

Software Engineer

ThreatSTOP — Carlsbad, CA 2015–2017

- Engineered a lightweight reporting API along side a high availability, horizontally scalable database architecture from proof of concept through full implementation Python (Flask RESTful), Elasticsearch
- Developed client-side reporting tools to chart, filter, and aggregate metrics on billions of database documents React, Gulp, Plottable, DataTables
- Contributed to the automated deployment of development clusters in a continuous integration environment Ansible, Jenkins
- Coded unit and functional tests for a variety of projects, maximizing code coverage for core company products PhantomJS, Codeception, nose
- Maintained and improved legacy software products and internal systems PHP (Zend Framework 1 & 2), MySQL, MongoDB, Perl, C++

Web Developer, Payment Gateway Specialist

InstaPAY International — Carlsbad, CA 2009–2015

- Lead a small team of junior developers that designed and developed an online multiapplication system involving cross-browser compatible signature capture and serverside PDF generation — PHP (CodeIgniter MVC), MySQL, jQuery, ImageMagick
- Specialized in payment gateway integration, working with corporate development teams to integrate payment processing APIs into enterprise level accounting software Various development environments, Sage CRM, AccPac, Mas 90, Sage 100 ERP

Web Developer

WebAssist — La Jolla, CA 2008–2009

- Architected, developed, and deployed a revenue sharing e-commerce community PHP, MySQL, Adobe Flex 3
- Maintained an enhanced reporting web portal for Adobe Acrobat Connect Professional — Adobe Connect 7 API (cURL, XML), PHP, MySQL, MOOTools
- Demonstrated proficiency writing project specifications and documentation.