J Rob Gant

SUMMARY

Senior development team lead with 15 years experience building web application software and guiding startup development teams.

EXPERIENCE

Senior Software Engineer, True Impact, Inc.
Boston, MA -- 2016-Present

My first project was to design and implement an API in Python with automated test coverage. Using the JSONAPI spec to define the API envelope, I designed the API and documented it using the OpenAPI Specification (Swagger). For the stack I used Docker for scalability and Python Flask for rapid development with decent performance. Pytest and Pylint ensured that the code was tested and well formed. As another major component in this project, I designed a database modeled after the API using Python SQLAlchemy and PyMySQL. I migrated the existing on premise database to a new database hosted in Amazon Relational Database Service for improved scalability and performance.

After completing the API upgrade, our focus moved to updating the AngularJS front end. I migrated the on premise website hosting to Amazon S3 and CloudFront. This allowed us to retire the old Apache PHP servers and avoid major IT overhead for the company. In addition, performance was significantly improved with the new CDN. Continuing my efforts to modernize the tools used, I introduced eslint tools that ensured strict code standards. This identified and prevented several JavaScript coding errors.

- Added Sphinx compatible documentation to Python and Javascript.
- Documented development, build, and deploy processes for the entire stack.
- Added cache busting of the asset files to the build process.
- Converted PHP API a Python 3 API stack with test coverage for exposed surfaces.
- Designed MySQL database to include referential integrity and normalization.
- Corrected integrity issues and then migrated existing database to the new design.
- Migrated the entire application from Linux VMs to AWS Cloud.
- Improved the AngularJS 1 application to conform to the current conventions in preparation for AngularJS 2.

Software Development Engineer, Tervela, Inc.
Boston, MA — 2015-2016

My goal was to modernize the codebase by developing a method to safely upgrade outdated versions of MongodDB, Python, and other tools.

My first project was to upgrade MongodDB before the provider dropped support for the version in use. I conducted research and built tools to resolve differences between the versions. After upgrading the databases for non-production systems, I built tools to gather and analyze logs from multiple servers to identify areas where problems were occurring and socialize them with my teammates.

Python upgrades are predicated on a solid testing system. I added automated testing into each of my projects. This included building a virtual environment where the Python code could be run locally using fixed versions of the packages to ensure reproducible results.

- Documented pylint standards.
- Built testing suite using py.test.
- Upgraded MongoDB from 2.4 to 2.6

Senior Software Engineer, Happier, Inc.
Boston, MA — 2014-2015

As this small startup's primary developer I was responsible for the entire technology stack. I learned and documented the numerous processes used to make the stack robust and self sustaining.

I was also responsible for expanding the API to support our Android, iOS, and web apps. As the API evolved I introduced RESTful concepts to make the API more robust.

I was also responsible for maintaining a rapid pace in adding new features to the web app and migrating the web structure to follow the recommended best practices for modern modular designed websites.

- Converted the AngularJS single page app website to Flask/Jinja2 for better SEO.
- Created a custom CMS for internal content editing on website.
- Migrated backend to Heroku from EC2s saving thousands of dollars a month.
- Improved website rating in WebPageTest.org from D to A rating overall.

Product Manager, SiteSpect, Inc.
Boston, MA — 2012-2014

I transitioned to a product management role at SiteSpect as the company expanded. My in depth knowledge of the product and the clients allowed me to assist the development team in making the product less technical and more friendly while adding new features. As part of the growing PM team I managed a complete redesign of the user interface focusing on key user personas and a complete rewrite of our documentation.

- Gathered and prioritized bug report and feature request tickets.
- Provide training and documentation to Sales, Professional Services, and Platform Operations teams for 4 major and 18 minor new releases in two years.
- Managed a team of 6 front end developers using agile development methodology.
- Developed an Online User's Guide integrated with the product UI.

Advanced Solutions Engineer, SiteSpect, Inc.
Boston, MA — 2008-2012

As the first front-end engineer on the team, I supported customers by designing and implementing experiments. I designed best practices for using the tools and support documentation to allow both growth of the team and more independent client usage. I mentored 5 ASEs and provided training to customers.

- Developed JavaScript libraries to support in page behavior tracking.
- Developed a guide to Regular Expressions and provided training programs to support clients in using the product.
- Developed log analysis scripts to provide detailed analysis of test traffic.
- Performed a QA function for changes to the product.
- Gathered feature request requirements and bug reports from users.

Senior Web Developer, RPM Communications
Maynard, MA — 2007-2008

As a consultant, I developed 2 social networking websites with telephone interactions. I also performed the role of IT support for internal systems and production web servers and databases. I was hired full time to continue supporting the websites and grow the development team by mentoring 4 junior developers.

- Implemented a design for scalable social website that allowed users to call, SMS, and email posts to their networks.
- Implemented a monitoring system to track system stability and performance with alerts and trending.

EDUCATION

Worcester Polytechnic Institute
Bachelor of Science Degree, Computer Science — 1998-2002

SKILLS

- CSS3, HTML5, Less CSS, Bootstrap
- Linux, MacOS, Unix, Amazon Web Services (AWS), Docker
- Python 2, Python 3, Perl, PHP, Regular Expressions
- JSONAPI, OpenAPI Specification (Swagger)
- JavaScript, jQuery, AngularJS
- MySQL, sqlite, MongoDB, PostgreSQL
- Apache, Nginx, Flask, Jinja2, Tornado, Node
- Bash, Awk, Grep, Sed, git, svn, Github
- pip, virtualenv, fabric, grunt, yeoman, npm

REFERENCES
Available upon request.