Gilbert Ryan Petris

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Summary

Lead Software Engineer/Architect with 11 years experience in all aspects of software development. Capable of learning and applying new technologies in a very short period of time. A true "full-stack" engineer that can design and develop not only the backend and frontend of an application, but also the environment in which the application runs including deployment orchestration.

Experience

SRE Architect   **July 2019 to Present**
NCR

- Designed and oversaw development of several internal tools for ensuring application quality as well as support effectiveness.
    - Production readiness framework to check the status of several analysis tools for an application to ensure application is ready to be deployed to production. This includes status of static and dynamic code analysis tools, application vulnerability scans, appropriate monitors have been setup and are healthy, etc.
    - Chaos testing framework using Litmus to run chaos tests against a running application while monitoring the application for responsiveness. Applications are then scored and ranked amongst their piers.
    - Slack chatbot (using Errbot) to submit Jira and ServiceNow tickets to the SRE team and for the SRE team to manage those tickets via Slack, including getting approvals from required persons via Slack.
- Diagnose problems that arise in staging and production and put into place temporary and permanent fixes as necessary.
- Ensure that production environments are setup in an automated fashion using Terraform and Harness or Jenkins pipelines.
- Write utilities/scripts as necessary to perform otherwise time-consuming tasks or to automate tasks which would otherwise require a ticket.
    - Wrote DNS synchronization script to synchronize a RFC 1035/1034 zone file with a DNS provider. The zone file exists in a git repository and teams can make changes by creating a branch and submitting a pull request.
    - Wrote Site 24x7 synchronization script to automate creating and updating monitors.
    - Several other scripts/utilities for automating regular day-to-day tasks such as assigning permissions.

Technical Lead   **July 2018 to July 2019**
NCR

- Led effort to move .NET Core and Angular applications from plain Docker containers to OpenShift then to Google Kubernetes Engine using orchestrated with Helm.
    - Implemented true blue/green deployments including acceptance tests that run after deployment and prior to making live.
    - Implemented health checks and horizontal pod autoscalers, as well as additional features in Helm charts making it easier to deploy with different features per environment (for instance, enabling SSL in some environments).
- Moved build process from Jenkins to Google Cloud Build along with Harness to better orchestrate builds and decrease build and deployment times.
- Ensure team members are following coding standards, best practices, and good technical design via code reviews.
- Orchestrated new environment creation using custom Python scripts which interact with the Google Cloud, Kubernetes, and Helm CLI tools. Also uses Docker containers to allow running on any platform supported by Docker allowing consistent runtime environment.
- Design (technical) certain features prior to development to address security, performance, and other architectural concerns.
- Subject matter expert for all parts of our application and environment.
- Mentor other developers in general programming concepts as well as performance and security concerns.
- Participate in normal Agile activities such as daily standups, grooming sessions, commitments, and end-of-sprint demos.
- Write unit tests for all new code (and old uncovered code when time is available) using xUnit. Unit tests are written in such a manner that they can be run against an in-memory API and database, or against a live system (for acceptance tests post-deployment).
- Track down difficult to find or reproduce problems via local debugging and/or logical analysis of application source code.
- Utilize ASP.NET Core MVC to create REST APIs. Frontend (Angular) is completely separate from backend (.NET Core) and APIs are used for all communication between the two.
- Utilize Atlassian products such as BitBucket (Stash), Jira, and Confluence to manage code, tickets, and information within our team and the company as a whole.
- Work daily with .NET Core (2.0-2.2), Angular (5-7), TypeScript, CSS (SASS), HTML, PostgreSQL, xUnit, and Git. Also work with Kubernetes, Docker, Helm, Bash, and Python on a regular basis. Occasionally work with Redis and ElasticSearch.

Senior Software Engineer   **December 2017 to July 2018**
NCR (via Tin Roof Software)

- Develop the Marketplace and Developer Experience for the Omni-channel Decision Support Platform.
- Participate in daily standups, grooming sessions, and quarterly planning.
- Perform code reviews to ensure standards and best practices are followed.
- Moved .NET Core and Angular applications from Windows hosts using IIS to Docker containers running on a Linux host.
- Worked daily with .NET Core (2.0), Angular (4-5), TypeScript, and SASS.

Application Architect   **February 2017 to December 2017**
TalentQuest (Corporate Psychology Resources, Inc)

- Create and implement technical design process to be used with major new features.
  - Allows all developers, QA, and stakeholders to be on the same page about what is to be developed.
  - Helped ensure that security, performance, and reusability concerns are addressed.
  - Also serves as documentation of the new feature to reference in the future.
- Led production support team consisting of two developers and one QA.
  - Ensure that the support needs of clients are met in a timely fashion.
  - Ensure that high-priority bugs are addressed in a timely manner as well as continuously working through the bug backlog.
- Oversee six additional development teams, two in the office and four offshore.
- Discuss requirements with stakeholders to ensure that the requirements are thoroughly understood as well as to clarify requirements.
- Design and document new features based on requirements, as well as give estimates based on the requirements and design.
- Diagnose and fix (or recommend potential fixes) for performance issues occurring in production.
- Introduced Angular 4 into application and led ongoing migration from Angular 1.x to Angular 4.
- Migrated TFS version control to Git, including migration of history and training the development team.

Technical Lead   **February 2016 to February 2017**
TalentQuest (Corporate Psychology Resources, Inc)

- Led user interface redesign project. First phase included upgrading the shell of the application (including menus, page titles, breadcrumbs, user information, etc.) in Angular in a manner that allowed toggling between the old and new shell; this allowed the new shell to be developed and tested while still showing the old interface to normal users. Second phase included re-writing individual pages in Angular.
- Discuss requirements with stakeholders to ensure that the requirements are thoroughly understood as well as to clarify requirements.
- Design and document new features based on requirements, as well as give estimates based on the requirements and design.
- Led development team consisting of 5 developers and 2 QA.
- Ensured on-time delivery of scheduled work items.

Senior Software Engineer   **February 2015 to February 2016**
TalentQuest (Corporate Psychology Resources, Inc)

- Rewrite backend of compensation appraisal calculations to allow a greater number of appraisals to be processed daily.
- Optimize various parts of the user interface to increase site responsiveness.
- Discuss requirements with stakeholders to ensure that the requirements are thoroughly understood as well as to clarify requirements.
- Design and document new features based on requirements, as well as give estimates based on the requirements and design.
- Introduced Angular 1.x and WebAPI into existing application to create a fast and responsive user interface.
- Developed frameworks to aid in integration between WebAPI and Angular as well as to define and manage Angular dependencies.

Implementation Team Lead   **January 2014 to February 2015**
Overgroup Consulting, LLC (now rev.io)

- Led development team consisting of two developers and two client success personnel.
- Ensure development is completed on schedule while also allowing last-minute or emergency work items to be addressed quickly.
- Create solutions based on client requirements that meet the needs of the client in addition to being reusable with the rest of our client base.
- Document solutions in a manner that both developers and the client can understand, including separate technical documentation if necessary.
- Estimate amount of time required for implementation of contracted features and provide an estimated release date to the client.
- Aided others in expanding their technical knowledge in general and with technologies and concepts used in our environment that they may not have known about.

Senior Software Engineer   **August 2011 to February 2015**
Overgroup Consulting, LLC (now rev.io)

- Solve problems in a high transaction volume environment that processes massive amounts of data daily, including but not limited to processing of call detail records, payment processing, commission calculations, tiered billing discounts, etc.
- Integrate with third-party systems such as carriers (Verizon, AT&T, etc.) and payment gateways (Authorize.Net, Stripe, etc.).
- Provide and consume APIs via SOAP or via REST using JSON.
- Debug code locally and remotely using Visual Studio's built-in debugger.
- Understanding and configuring SPF, DKIM, and DMARC records in our DNS to improve email delivery.
- Subject matter expert for our internal applications as well as provisioning with third-party carriers and payment gateways.
- Working directly with other departments to solve problems in a collaborative and efficient manner.
- Write unit tests for new and existing code using NUnit and xUnit.
- Accurately estimating time required for development, testing, and QA of development items.
- Utilization of agile development methods to allow new features and other development items to be released early and often.
- Administration of third-party systems hosted in-house, such as Switchvox, Jira, Confluence, and Stash.
- Administration of Unix services such as MySQL, SSH, ISC DHCP Server, and TFTPD.
- Administration of Windows Server 2012 r2 as well as various Linux operating systems such as Ubuntu, Debian, and CentOS.

Software Engineer - Overgroup Consulting, LLC (now rev.io)   **August 2009 to August 2011**
Software Development Intern - Overgroup Consulting, LLC (now rev.io)   **May 2009 to August 2009**
Aerospace Ground Equipment Technician - United States Air Force   **October 2003 to October 2007**

Education

Master of Science in Computer Science / Software Engineering   **December 2015**
University of West Florida – Pensacola, FL

- Major GPA - 3.97

Bachelor of Science in Computer Science / Computer Information Systems   **May 2010**
University of West Florida – Pensacola, FL

- Major GPA - 3.97, Cumulative GPA - 3.66
- President's Honor Roll earned every semester attended.

- 1st place winner of the 2009 Association of Information Technology Professionals National Collegiate Conference Java Programming Competition.