Prajjwal Bhandari

Toronto, Canada • pbhandari@pbhandari.ca • @pbhandari

Experience

Senior Software Developer ***GE Vernova (via Opus One Solutions)*** *May 2020 — Current*

- Worked on a Grid Analysis system at Opus One Solutions, which was then acquired by GE Vernova.
- Led a team of 5 in the development of a smart-grid solution which allows for dynamically updating the electrical grid in response to real world phenomena.
- Led a cross-team effort to guarantee High Availability across all microservices, guaranteeing 5-9s of reliability (<5 mins/year of unplanned downtime).
- Created microservices to allow for a more long-term grid analysis, enabling users to plan grid upgrades and identify all impacted areas due to that.
- Improved release processes, and release testing timelines, from 2 weeks to 3 days allowing for to iterate with the other microservices in a monthly cadence, guaranteeing faster feedback loop for integration failures.
- Created API Guidelines ensuring consistency across various teams and microservices.
- Led the migration of 40+ microservice repos from an existing Gitlab to a GitHub.
- Improved the worst case response time of an endpoint from 30s to 1s, by fixing a poorly optimized query.

Technologies Used: Python, Flask, FastAPI, Angular, PostgreSQL, Docker, K8s, kafka, AWS, Linux, GitHub Actions

Software Developer ***Symbility Intersect*** *Dec 2019 — May 2020*

- Worked as a part of an internal support team to improve project management processes.
- Created an application which integrated with a set of external tools to streamline project management processes.

Technologies Used: Python, Django Rest Framework

Intermediate Software Developer ***G Adventures*** *Jun 2016 — Dec 2019*

- Implemented new features, and bug fixes, for the homegrown reservations, and trip management system.
- Created an API to gather, and expose, customer readiness for a trip before they went on it. Reducing the workload for the sales staff, and improving the customer experience on the ground.
- Improved the on-the-ground experience by allowing us to gather and store customer preferences in a more structured format. Reducing complaints from both our customers, as well our suppliers, and ensuring a more smooth experience throughout.
- Updated the existing test infrastructure to 100% green, and utilized Ansible to provision dev machines removing the need for a dedicated dev environment.
- Created a stateless microservice to securely accept customer payment, allowing us to expand the types of payment that we accepted, and ensuring compliance.

Technologies Used: Python, PostgreSQL, Ansible, Django, DRF, Celery, AWS, Linux

Junior Compiler Engineer ***IBM*** *May 2015 — Jun 2016*

- Implemented various optimizations for the IBM Java JIT, and investigated bugs with it.
- Created a CI cache, and utilized that in the build farm improving CI times to 2 hours (from the original 30).
- Improved the development process for the existing team by investigating build slowness, thereby improving CI time to 2 hours (from the original 30). This allowed us to promote our JIT to the suite build queue much faster leading to faster turnaround time overall for a variety of bugs.
- Migrated the codebase from existing old version control system (RTC) to `git`.

Technologies Used: C/C++, ASM, Perl, Python 2, Shell, Linux, Jenkins

Education

Bachelor of Science in Computer Science *University of Toronto* *2015*