Suba Sah

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EDUCATION

University of Toledo

Toledo, OH

Master in Computer Science and Engineering, GPA: 4.0

Jan 2020 - Fall 2021(Expected)

Institute of Engineering, Central Campus, Pulchowk

Kathmandu, Nepal

Bachelor in Computer Engineering, GPA: 3.5

Oct 2011 - Dec 2015

Experience

Graduate Research Assistant

Apr 2020 – Present

University of Toledo

Toledo, OH

- Research in dispatching strategy and optimization used for Integrated Energy System (IES) using Deep Reinforcement Learning
- Deployed python simulation into RAVEN, a framework developed by Idaho National Laboratory
- Wrote python modules for parameter optimization in transactive energy system to train a neural network
- Technologies: OpenAIGym, Ray, RLlib, Python, PySpice, Pytest

Monotype Imaging Holdings Inc. (UBA Solutions)

Jan 2019 – Dec 2019

Senior Software Developer

Kathmandu, Nepal (Boston, HQ)

- Architected AWS flow for 10+ microservices and websites within company's product
- Developed and deployed 4 dockerized microservices and 4 microsites using AWS components
- Improved browsing speed of the website by avg. 5 sec
- Wrote code adhering to OOD, SOLID principles and various design patterns
- Performed A/B testing using Google Optimize
- Integrated third party scripts using Google Tag Manager (GTM)
- Technologies: PHP, JavaScript, TypeScript, React, Redux, Docker, Ngnix, MySql, PostgreSql, Redis, AWS, Jira, Jenkins, CI/CD, BDD(Cucumber, Gherkins), Elasticsearch, Webpack, Selenium, Confluence for documentation
- Unit Testing: Codeception, PHPUnit, React Testing Library and Jest

Global Digital, Nepal

Nov 2016 – Dec 2018

Software Developer

Kathmandu, Nepal (Oslo, HQ)

- Rebuilt legacy monolithic software to scalable microservice based architecture
- Developed REST API for magazine subscription management system
- Implemented different payment gateways (Stripe, PayPal, and Mastercard)
- Enabled 100K+ customers to publish/pay and advertise their service
- Worked with cross-functional agile team
- Technologies: PHP, JavaScript, TypeScript, React, Redux, Jira
- Unit Testing: Codeception, PHPUnit, React Testing Library and Jest

Publications/Projects

Idaho National Laboratory (INL) | Implementing Real-Time Sub-gradient Optimization

Jan 2020 – Jul 2020

- Optimization based control for renewable energy park
- Simulation verified for synchronization and bridging functions
- Submitted to IEEE PES general meeting 2021

Live Movie Search | JavaScript, React, Redux, Thunk, Git, Git Flow

Jan 2019 - Feb 2019

- Integration of IMDb API for listing movie details
- Thunk-redux middleware for asynchronous API call

Awards

Academic Excellence Award, Institute of Engineering Tuition Fee Waiver Award, University of Toledo