

# Hemanta Sapkota

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## Work Experience

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### Software Engineering Intern

Aug 2015 - Jun 2016

Splunk Inc.

Shanghai, China

- Analyzed Splunk mobile application end-user activity log with millions of records every week using Splunk Processing Language (SPL) to build a dashboard to gain insight from the machine data such as daily active users, new user and old user retention pattern, common mobile device and OS
- Enhanced in-house Paid Time Off (PTO) system, with MongoDB, NodeJS, ExpressJS and added new features to support the functionality for intern's use
- Worked on User Interface for data visualization of dashboard of main Splunk product using BackboneJS

### International Product Delivery and Management Engineer

Aug 2017 - July 2018

ZTESoft, Nepal

Kathmandu, Nepal

- Built various daily report generating algorithms using SPL by analysing thousands of new daily users and millions of daily phone call logs generated by a Telecom provider
- Suggested customers about new features which they might need in their CRM system and incorporated those new features in their system

### Graduate Research Assistant

Aug 2018 - Aug 2021

University of Nevada, Reno

Reno, NV

- Improved performance of data streaming algorithms between various high performance computing (HPC) systems by up to 24%
- Collaborated on Robust Integrity Verification Algorithm (RIVA) to improve performance by dynamic parallelism algorithm to add new checksum and transfer thread which improved the speed by some order of magnitude

## Education

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University of Nevada, Reno

Aug 2021

M.S. in Computer Science and Engineering

Reno, NV

Fudan University

July 2016

B.E. - Software Engineering

Shanghai, China

## Technical Skills

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### Programming Language

- Natively Fluent: Python, Java
- Conversationally Fluent: JavaScript, C++, SQL, Splunk Processing Language, HTML, CSS, PHP

### Tools and Platforms

- Experienced In: OOP, Git, MySQL, Machine Learning, JSON, Scikit-Learn, Scipy, Pandas, Numpy
- Familiar With: NodeJS, ExpressJS, MongoDB, Backbone

## Publications

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- Charyyev, Batyr, et al. "Towards securing data transfers against silent data corruption." 2019 19th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGRID). IEEE, 2019.
- Sapkota, Hemanta, Md Arifuzzaman, and Engin Arslan. "Sample Transfer Optimization with Adaptive Deep Neural Network." 2019 IEEE/ACM Innovating the Network for Data-Intensive Science (INDIS). IEEE, 2019.
- Sapkota, Hemanta, Bahadir A. Pehlivan, and Engin Arslan. "Time series analysis for efficient sample transfers." Proceedings of the ACM Workshop on Systems and Network Telemetry and Analytics. 2019.