# Subigya Nepal

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#### Education

2018 - Present PhD in Computer Science, Dartmouth College, USA.

2013–2017 **Bachelors in Computer Science and Information Technology**, *Deerwalk Institute of Technology*, Nepal.

#### Selected Publications

Percom Magazine **Predicting Job Performance Using Mobile Sensing**, Shayan Mirjafari, Hessam 2021 Bagherinezhad, **Subigya Nepal** et al.

ICMI 2021 On the Transition of Social Interaction from In-Person to Online: Predicting Changes in Social Media Usage of College Students during the COVID-19 Pandemic based on Pre-COVID-19 On-Campus Colocation, Weichen Wang, Jialing Wu, Subigya Nepal et al.

Percom Magazine Assessing the Impact of Commuting on Workplace Performance Using Mobile 2021 Sensing, Subigya Nepal et al.

IMWUT 2020 Detecting Job Promotion in Information Workers Using Mobile Sensing, Subigya Nepal et al.

JMIR 2020 Mental Health and Behavior of College Students During the Early Phases of the COVID-19 Pandemic: Longitudinal Smartphone and Ecological Momentary Assessment Study, Jeremy F Huckins, Alex W DaSilva, Weichen Wang, Elin Hedlund, Courtney Rogers, Subigya Nepal et al.

CHI 2020 Social Sensing: Assessing Social Functioning of Patients Living with Schizophrenia using Mobile Phone Sensing, Weichen Wang, Shayan Mirjafari, Gabriella Harari, Dror Ben-Zeev, Rachel Brian, Tanzeem Choudhury, Marta Hauser, John Kane, Kizito Masaba, Subigya Nepal et al.

IMWUT 2019 A Multisensor Person-Centered Approach to Understand the Role of Daily Activities in Job Performance with Organizational Personas, Vedant Das Swain, Koustuv Saha, Hemang Rajvanshy, Anusha Sirigiri, Julie M Gregg, Suwen Lin, Gonzalo J Martinez, Stephen M Mattingly, Shayan Mirjafari, Raghu Mulukutla, Subigya Nepal et al.

IMWUT 2019 Differentiating higher and lower job performers in the workplace using mobile sensing, Shayan Mirjafari et al.

#### Competencies

Languages Python, Java, C/C++, JavaScript, Bash

Data Analysis Jupyter, Pandas, Numpy, SciPy, Matplotlib, Seaborn

ML Libraries Scikit-Learn, PyTorch, FastAl, Mlxtend

Mobile Android, PyTorch Mobile

Web PHP, Ajax, Flask, HTML/CSS, Nginx, Apache, NodeJS, WordPress

Database MySQL, PostgreSQL, MongoDB, SQLite

Version Control Git, SVN

### Professional Experience

Sept 2018 - Graduate Research Assistant, DartNets Lab, Dartmouth College, USA.

Present I primarily work with ubiquitous sensing devices such as mobile phones and wearables, developing apps that can connect to and communicate across different devices and technologies. My team and I perform different kinds of analysis leveraging deep learning and machine learning models on such passively collected sensing data from multiple modalities, mostly to assess and predict human behavior, such as job performance and well-being. I currently contribute on several multidisciplinary projects, some of which include:

- Multi-model sensing to predict workplace performance.
- Capturing soldier state through continuous smartphone sensing.
- Studying the connection between brain networks and human behavior to understand motivation in patients with serious mental illness.
- Personalized modeling to help people with major depresssive disorder.

Aug 2015 - Aug Co-Founder & CTO, TechLekh Services Pvt. Ltd., Kathmandu, Nepal.

2018 TechLekh is a fast-growing technology media startup based in Nepal that I co-founded while I was in my undergrad. We started our operations as a tech media company along with a sister offshoot that specialized in software development services. I led the software development branch, which successfully delivered big projects including educational tech platforms, machine learning products and several web applications. The main startup, TechLekh, is currently one of the leading tech media properties of Nepal and has a large following in the technology scene there. My responsibilities as a Co-founder and CTO were diverse, from managerial, for instance, setting organizational goal to developing products such as while leading the sister organization.

2015

Mar 2014 - Aug Search Engine Optimization Analyst Intern, Deerwalk Services Pvt. Ltd., Kathmandu, Nepal.

> I was responsible for assessing and optimizing the Search engine visibility and performance of the corporate websites of Deerwalk Inc., a healthcare analytics company and its Nepal based subsidiary, Deerwalk Services Pvt. Ltd. I helped improve the rank and traffic of the websites implementing best practices for both on and off page SEO, primarily focusing on better Google visibility. Deerwalk Inc. has recently been acquired by Cedar Gate Technologies LLC.

## Teaching Assistantship

Spring 2020 Smartphone Programming, Dartmouth College, USA.

Spring 2019 Smartphone Programming, Dartmouth College, USA.

Fall 2018 Security and Privacy, Dartmouth College, USA.

Fall 2017 **Embedded Systems Programming**, Deerwalk Institute of Technology, Nepal.

Fall 2017 **Digital Logic**, Deerwalk Institute of Technology, Nepal.

#### Miscellaneous

Reviewer IMWUT 2019, CHI 2021, CSCW 2021, Nature Scientific Reports 2021

Languages English (fluent), Hindi (fluent), Nepali (native)

Membership Association for Computing Machinery (ACM)

References Available upon request.