

SANDESH CHHETRI

Address: 3/301 Waterloo Street, Frenchville, QLD 4701
Mobile: (04) 2755 8241
Email: sandesh.chhetri@cqumail.com
Website: sandeshchhetri.com.np
LinkedIn: www.linkedin.com/in/sandesh-chhetri/

Professional Summary

Passionate about electronics and data. Currently, I'm involved in optical filter design and machine learning algorithms and their implementations. I am looking for an internship as an electrical engineer.

Academic Qualifications

Master of Engineering: Electrical **July 2019 - Present**

CQUniversity North Rockhampton, QLD 4701, Australia

Bachelor of Engineering: Electronics and Communications **Oct 2014 - Nov 2018**

Paschimanchal Campus, Institute of Engineering, Pokhara, Nepal

Engineering Projects and Coursework

Load Frequency Control

- Found the Transfer Functions of Governor, Turbine, and Generator with given data provided using System Identification tool in MATLAB.
- Designed and tuned a continuous PID and developed a discrete PID controller accordingly with different transformation methods with the optimal sampling time and simulated the whole plant in MATLAB.

Sensors and Actuators with PIC18F4321 Micro-controller

- Built a Home Automation System implementing sensors, actuators, and some 3D printed blocks.
- Utilised microcontroller's timers and interrupts for communication with sensors.
- Analog to digital conversion and programming peripheral chips; learned the overview of CPU architecture and used some assembly language too.
- Learned about different communication protocols like UART, I2C, etc.

Decentralised Voting System Based on Blockchain

- Built a blockchain data structure from scratch in Python.
- Using Flask, built a web app where the blockchain network was implemented.
- Learned the essential components of blockchain network like consensus, decentralisation, immutability, distributed ledger, etc.

Technical Skills

- **Computer Networking:** Knowledge of network wiring and LAN setup. Knowledge of principles of cryptography, digital signatures, firewalls, etc.
- **Electronics:** Electronic circuits and integrated circuits design. Extensive knowledge of micro-controllers, sensors, and actuators.
- **Web development and Database:** Proven ability to design and maintain websites and databases. Basic knowledge of distributed file systems, i.e., Hadoop, Google file systems.
- **Data Visualisation and Analysis:** Basic working knowledge of data analysis, manipulation, and visualisation with Python and its frameworks and libraries.
- **Lab Equipment:** Oscilloscopes, digital multimeters, and soldering skills

Software Skills

C, C++, JavaScript, Node.js, SQL, Python, MATLAB

Work Experience

Student Volunteer:

CQIRP, CQUniversity, North Rockhampton, QLD 4701

July 2019- Aug 2019

- Worked under the direct supervision of the project supervisor, Dr Surya Bhattarai, while maintaining excellent communication with research assistants.
- Assisted with the counting, analysing and restocking of gamma rays treated sesame seeds.
- Developed confident, articulate, and professional speaking abilities (and experience).

Lab Assistant:

Balodaya Secondary School, Pokhara, Nepal

Dec 2018 – Mar 2019

- Provided instruction to all lab users on the proper use of all equipment.
- Presented software packages and applications and developed lab templates.
- Configured hardware, devices, and software to set up workstations for students.

Certifications

Registered Electronics and Communication Engineer,
Nepal Engineering Council

May 2019

Affiliation

Student Member, “Engineers Australia”

July 2019 – Current

Member, “Paschimanchal Campus Robotics club”

Dec 2016 – Oct 2018

Member, Club of Technical Students (COTS), Paschimanchal Campus

July 2017 – Feb 2018

Awards

Best project presentation on use of blockchain for secured voting systems,
IOE Paschimanchal Campus

Sept 2018

Interest

- Soccer
 - Teaching
 - Reading books
 - Photography
 - Trekking
-

References

Surya Bhattarai

Senior Research Fellow/Associate Professor
CQIRP, CQUniversity
Email: s.bhattarai@cqu.edu.au
Phone: (04) 2280 0518
Campus: Rockhampton North

Lam Bui

Senior Lecturer
School of Engineering and
Technology, CQUniversity
Email: l.bui@cqu.edu.au
Phone: (03) 9616 0629
Campus: Melbourne