DARSHAN ACHARYA

+9779860637925 acharyadarshan02@gmail.com

Education

Bachelor of Computer Engineering IOE, Paschimanchal Campus Pokhara, Nepal 2017 – 2022

• Percentage: 70.6%; Passed with first division honours

+2(High School) United Academy Lalitpur, Nepal 2015 – 2017

Percentage: 75.6%; Passed with distinction marks

Relevant coursework:

Data Structures & Algorithms; Machine Learning; Operating Systems; Digital Computation; Signals & Systems; Differential Equations; Advanced Calculus; Software Engineering, Linear Algebra, Computer Architecture

Experience

<u>Software Engineer</u> <u>Leapfrog Technology</u> *kathmandu,Nepal* **01/2022 – 09/2022**

- Part of the Frontend team where I helped build scalable and stable applications, mostly in the health-related sector for multiple national and outsourcing enterprises using React JS, Typescript, Node JS, Chakra UI. Particulary worked on the UI design, state and component management, optimization and testing of of applications.
- Designed and implemented scalable system APIs and background workers responsible for managing backend structure using Nodejs and Typescript. Continuous Integration/Deployment Pipeline Integration, Code Reviews, Unit Testing

Software Engineer, Intern Leapfrog Technology Inc kathmandu, Nepal 10/2021 – 01/2022

- Designed and implemented various frontend applications and design using CSS2, CSS3, Javascript, Nodejs, Firebase, Docker with the help of senior developers and mentors asssigned to the team.
- Selected as one of the 28 interns from a pool of 1600 applicants with acceptance rate less than 5%

<u>Machine Learning Engineer, Intern</u> GritFeat Solutions kathmandu,Nepal 05/2020 – 09/2020

- Conducted detailed error analysis and developed models by breaking down the error classes and prepared a report on limitations of the model and improvement strategies on the road traffic data for the Government of Nepal.
- Used semi-supervised algorithms to utilize a large number of unannotated data for model training.
- Familarized with GAN, VAE, Factorization machines by participating in paper reading session.

Software Engineer, Intern Diagonal Technologies kathmandu, Nepal 01/2020 – 04/2020

 Learned and immplemented API development, including RESTFUL APIs, microservices and graphQL. Trained in handling security and data protection, authentication and authorization between multiple systems, servers, and environments. Learned to write automated test suites for correctness and scalability.

Undergraduate Teaching assistant Paschimanchal Campus pokhara, Nepal 2020–2021

• Worked under the supervision of **Er. Hari Prasad Baral**, then Head of department of Computer Engineering in Paschimanchal campus to organize and immplement various daily lesson plans and coding sessions for first year (fresher) students.

Executive Member Innovative Computer Engineering Society pokhara, Nepal 2019 – 2021

• Worked as an executive member of the Innovative Computer Engineering Society under the department of Computer Engineering where we helped organize different technical programs, training, and conferences with my seniors and mentors from different insitutional and technical organizations to the students of Paschimanchal Campus.

Projects

- LOGIC SIMULATOR: This application helps you to build different circuit diagrams such as johnson counter, half and full adder etc and visualize it . Code Quick Video Demo
- <u>CHINESE TO NEPALI TRANSLATOR</u>: An application which can translate chinese to nepali speech offline. Bible corpus dataset is used for training on transformer model. Tacotron 2 model is used for making text to speech system. <u>Code</u>
- <u>DRAW USING FOURIER TRANSFORM</u>: This application helps to visualize how you can draw any figure using the application of Fourier transform. <u>Demo</u> <u>Code</u> <u>Quick Video Demo</u>
- <u>AUTOMATED MUSICAL TUNE COMPOSITION</u>: This application helps you to generate ABC musical tune notations on the go that can be played by using a inbuilt media player. <u>Demo+working Code</u>

- <u>2D FIGHTING GAME</u>: Designed and developed a sonic-style modified retro game as a part of an internship project at Webpoint solutions <u>Code</u> <u>Quick Video Demo</u>
- <u>NEPALI BLOCKCHAIN:</u> This application helps you to visualize the core principles on which any block chain application is build upon. <u>Code</u> <u>Quick Video Demo</u>

Participation and Achievements

- <u>Gold Award</u>: Won 1st prize for **Vector Codecamp, 2074** as a team leader along with my teammates Sulav and Milan. We made a portable Electrocardiogram device that helps you to measure the arrhythmic activity of the heart on the go.
- <u>Code with Coffee</u>: 3rd position secured among 38 teams organized by ICES(Innovative Computer Engineering Society), It is a two-day light competitive coding contest where a set of challenging coding problems are solved.
- Recepient of IOE Scholarship: Secured 578 rank among sixteen thousand students appearing on National Engineering Entrance examination.
- Winter School in AI: Participated in 11day AI workshop organized by NAAMI (Nepal Applied Mathematics and Informatics Institute for Research)
- <u>HULT prize</u>: Reached to **HULT prize** competition campus finals for two times with my team members. We presented a viable one stop solution to deliver fresh green grocery from the farm to doorstep of customers within a 24-hour timeframe.

Skills

- FrontEnd: CSS3, Javascript, React, Typescript, Next Js
- Backend: NodeJS, Django, Firebase
- ML programming: Python, Pandas, Numpy, Keras, ,Scikit Learn, Tensorflow,Pytorch
- Tools: Git, Github, Bash, Linux, Familarity with Docker