RAMESH DHUNGANA

Graduate Research Assistant At ODU (Computer Science)



EXPERIENCE

Grauduate Research Assistant Old Dominion University

Jan 2022 - present

- Graduate student with Major at M.S in Computer Science
- Research Assistant at Old Dominion Research Foundation Handson Lab

Full Stack Developer

Freelancer at Upwork

🗎 Jan 2020 - December 2021

- Independently completing project requiring full stack development.
- Specializing further in google cloud services and firebase

Software Engineer

Insight Workshop

May 2018 - November 2019

- Development of Online software selling Software for US based company (they were selling it using CDs)
- Web Hosting and Cloud Maintenance using AWS and Digital ocean.
- Embedded system Implementation (US based Project) for Remote Control of ATM vending Machines using device called WiRFi
- Full-Stack programming instructor for intern programmers
- Database Modelling for Online Enterprise Resource Planning Software
- Assistance in local server setup and regulation for Restaurant using ERP Software
- Leadership in Design, Modelling and full-stack (both back-end and front-end) development, hosting and cloud maintenance of Event Management Software (for Australia based Client Of Company)

Software/Web Developer

Prixa Technologies

Mov 2017 - April 2018

- ♥ Koteshwor, Lalitpur
- Development of many national Online News sites (currently operating in Nepal)
- Database management of live sites including switching of database library to their re-storage to new adaptation
- Design, Modeling and development of Customer Management Software

PROJECTS

Student Loan Payment Application (US)
Upwork

SKILLS

Angular9, Javascript, Typescript

Firebase, Firestore, Cloud-functions

Google cloud services | python

Django Rest Framework (DRF)

node HTML,CSS, SCSS, Ajax

Databases (NoSQI, mysqI, postgresqI, sqlite)

AWS including ec2, RDS, S3,VPC, IAM

git Raspberry PI

Network Implementation (local server setup,

port forwarding (SSH connection, remote access)

PM Tools including Jira, ActiveColab, Trello

Compatible with both windows and linux

others: numpy, matlibplot, jupyter notebook,

web scraping,C, C++,c#

EDUCATION

B.E in Electronics and Communication Engineering Western Reginal Engineering

72.11 %

XII Board

Higher Secondary Education Board

2010 - 2012

Science, 83%

School Leaving Certificate
SLC Board Nepal

2010

90.37%

RESEARCH INTERESTS

- Web development, Web Security and secure programming
- Data Science
- Cloud Computing
- System Software, testing and analysis

- A financial technology web application that includes multi tenant admins, multi tenant end users, configurable dynamic roles and permissions both in client and server side, security rules, many external API services and many more(what a complete application would demand)
- Project is built using angular9, django, node, firebase, cloud functions, google cloud servies.
- Project is using the external API services including Stripe, Plaid, Right-foot, Synapsefi

Online Work Marketplace application

Online Work Marketplace application Upwork

• An web application which helps to connect the clients and work providers

Visit Map Application

Upwork

- An Admin application to CRUD on collections with the firebase database
- Project was built using angular10 and firebase (firestore)

Event Management Software

Insight Workshop

- A software that manages the entire activities of event including registration,accommodation and transportation booking, payment and report generation.
- Angular6 used for front-end and Django Rest Framework used for APIs and mysql as database engine. Stripe used for payment integration.

WiRFI (Remote Control of ATM vending Machines) Insight Workshop

- US based project that required Web Service that allows the remote control of ATM vending machines including restart of ATM power supply, live camera view,regular network strength and signal status of WiFi connected to the ATMs and storage of these data/signals to AWS cloud.
- Project required implementation of networking concepts as ssh tunneling, port forwarding, IP configuration, firmware programming (OpenWrt OS) for interconnecting customized device called WiRFi.

Online Software Sale

Insight Workshop

- A Web portal that provides platform to upload the software (installation files) by company and download them by customers using authentic license keys.
- Keeps the tracks of downloads and installations of software along with verification of their license keys

Real Time Vehicle Tracking System

Insight Workshop

 A system to collect real-time motion specific data from a mobile (default GPS feature) periodically uploaded to server via the internet and its location viewed through web using Google MAP API services.

Online News Portals

Prixa Technologies

• A software system to upload news (by media house admins) and online web portal to view the news for general public.

Customer Resource Management Prixa Technologies

 A system Admin panel to manage all the customers of the company including their projects, project status, contact details, payments, billing generations, notifications and email tracking system.

E-attendance and discussion web forum for college Major Project

- Integrated the attendance fingerprint module with raspberry pi such that each module kept at a class used to recognize the fingerprint of students (once already registered) and keep track of attendance class and faculty-wise and upload it server (like digital form of paper attendance collected by lecturers) that could be viewed by respective lecturers online through site after login.
- forum similar to concept of stack-overflow where students and lecturers of college could interact on subjects matters
- uploads and downloads of routines and notes on different subjects

Remote Home Automation System and Camera Access Minor Project

 Home Electronics devices including bulbs,motors,alarms,live camera could be switched on/off using web portal/mobile app remotely (was prototype). Used raspberry pi as power controller to devices through relay switch and home server (connected to cloud server)