## Bhoj Bahadur Karki

Software Developer

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Web: <a href="https://www.bhojkarki.com.np/">https://www.bhojkarki.com.np/</a>

## **Summary**

A young and enthusiastic software developer with four plus years experience in web and desktop, and two and a half years of experience in embedded system software development. An accomplished and driven professional with an entrepreneurial spirit. Possessing a proven ability to contribute to a company at both strategic and operational level. Passionate about bringing positive change in the corporation with the help of technology.

## Professional Strength:

- 1. Ability to deliver production-ready codes within a short duration of time depending on the requirement.
- 2. Strong knowledge of all phases of software development.
- 3. Ability to adjust quickly to changing priorities, and make quick decisions with given information.
- 4. Strong organizational, communication, leadership, and customer service skills.
- 5. Strong project planning, management, and technical problem-solving skills.
- 6. Highly details-oriented, excellent analytical skills and willingness to work as part of a rapidly

growing, truly global team.

- 7. Willingness to travel nationally and internationally for projects and other remote office support/work.
- 8. Excellent oral and written English language skills, including excellent project/process documentation skills

## Experiences

2017/sept-2	Software Developer
018/sep	OLE-Nepal, Nepal
(duration: 1	Was responsible for building pustakalaya.org which has more than 7,000
year)	content including documents, audio and video from design to finished
	product with other developers. I mainly focused on backend part but also
	did frontend in this project. My main responsibilities were:

- Responsible for designing core part of database schema along with other developer
- Responsible for creating search filter using vue.js
- Refactored and reviewed other members code.
- Responsible for search suggestion, social login system, feedback system, add to favorites, review system, etc
- I also collaborated with other developers in building other feature in this application from start to finish.
- Helped building API of the platform for further mobile application development for other developers
- Implemented docker for production and solved issues related to production.
- Technology used in this application : django, python , vue js, Elasticsearch, Redis, postgres(production), sqlite(development) , celery, javascript, jquery, sass, gulp.

Link: <u>pustakalaya.org</u>

GitHub link: <a href="https://github.com/bhoj001/pustakalaya\_lib">https://github.com/bhoj001/pustakalaya\_lib</a> (recently we have moved to gitlab on our own server)

## 2015-2017-july (2years and 5 month)

## Embedded system software developer

Temcocontrols pt. Ltd., Canada, secondary office kathmandu

Performed software design and development based on the TemcoControls hardware by collaboration with hardware engineers.

- Performed data manipulation form T3000 hardware (Temco device) based on Bacnet and Modbus protocol.
- Performed IOT works by taking data from hardware and the internet and comparing both of them.
- Based on the analysis different analytical diagrams were created.
- Data were pulled from sensor to T3000 controller and to our software through Bacnet protocol.
- Developed different types of mapping function on the data and presented in the software.
- Presented a simulation of different devices running under T3000 in visual ways.
- Studied and presented data on different charts such as PH Chart and Psychrometric chart.
- Collaborated with team members for debugging and testing.
- Traced bugs and improved features regularly.
- Developed system mostly on .net framework and windows operating system.

Project link:

	1. https://github.com/temcocontrols/T3000_Building_Automation_System  2.Major work: (a)https://github.com/temcocontrols/T3000_Building_Automation_System/tree/master/Psychrometric%20Tool/PH_Application  (b)https://github.com/temcocontrols/T3000_Building_Automation_System/tree/master/Psychrometric%20Tool/Psychro%20Tool
	Freelance Jobs
2018/sept-2 019/jan	Software engineer-as freelancer Angelswing, South Korea During this time period I was assigned various task related python and ruby on rails. I build api based on AWS, python and rails. Processed large set of drone data(4-5 GB normally) and analyzed various parameters to generate chlorophyll calculator, nvdi calculator, etc. I was assigned to build various api for GIS related applications.  Tools used during this time period: python, ruby on rails, bash, AWAS, QGIS, slack
2014-oct- 2015-jan	Freelance web developer- as freelancer  During this period I was responsible for development of the websites and their content. I had to work on for 3 months building this site.  • Responsible for design, development, and deployment of website  • Responsible for Search Engine Optimization (SEO), and google analytics works.  • Responsible for teaching and handling the content of the site.  • Giving constant feedback and support for client.  Project and their Link:  1. Version that I created can be seen here: https://web.archive.org/web/20170924023614/http://www.hitechintl.edu.np/about-us/
	College major project

2014-2015	Optical Mark Recognition software
	This is my major project during my college years. In this software I have
	applied series of image processing algorithms for recognition and
	detection of marks as well as filtering students results based on the
	recognized mark sheet. Bubbled filled sheet will be provided to students
	where they will fill the form with correct answers then those sheets will
	be scanned with a scanner and feed into our system for further
	processing. Our system will take the image and process it and compares it
	with the correct answer template and prints all the students results into
	one sheet for teacher.
	Processes involved in the software:
	<ul> <li>Designing sheet</li> </ul>
	Grey Conversion
	<ul> <li>Histogram processing and threshold calibration</li> </ul>
	Binary conversion
	• Corner detection
	• Rotation
	Mark detection
	• Cluster filtering
	Evaluation of roll number
	Other Project:
	During college times and my career I have developed other projects
	besides my work:
	Image editor
	Web scraper
	Git tool for automatic push and commit at certain day in week
	<ul> <li>Online movie site booking system,</li> </ul>
	Attendance system (java, android).
	• Scientific calculator(in C# and in MFC C++)
	Ecommerce site in Magento for KtmKart
	• Space Shooter, bubble jump, target shooter Games in C# using
	unity

# Education

2011-2015	B.E Computer
	Nepal Engineering College, Bhaktapur (Pokhara University)
	Grade :3.36/4.0

#### Skills and Abilities

### I have the following technical skills:

- 1) **Programming languages**:
  - a) **fluent:** python, javascript, JQuery, AJAX, C#(.net)
  - b) **familiar:** Java, C/C++, php, shell scripting, nodejs
- **2) Databases:** Postgres, MySQL, MSSQL, SQLite, Access Database, MongoDB, elasticsearch
- 3) Framework:
  - a) Front-end: Vue.js, React
  - **b) Backend:** Django(python)
- 4) Version control: GitHub and gitlab
- 5) Platforms: Linux and windows
- 6) **DevOps tools and others:** bash script, docker, aws, heroku, linux, nginx, redis, celery
- 7) CI/CD: jenkins, gitlab
- 8) Software Testing: Selenium IDE, Selenium Webdriver
- 9) Project management: Asana, Trello
- 10) Design tools: Adobe XD, gimp, photoshop
- 11) Communication: slack, hexchat, skype
- 12) CMS: Wordpress, django CMS
- 13) Other tools: html5, css3, bootstrap, sass, gulp
- **14) Familiar with framework:** .NET and android studio
- 15) Fluent in languages: English, Nepali and Hindi.

# Personality Trails

- Keen of bringing positive change in society by means of technology.
- Proactive, confident and with a positive "can-do" attitude.
- Ability to work under pressure, punctual, dedication towards work.
- Highly Collaborative and able to work in teams or groups

#### **Awards**

- Received full scholarship for bachelor's program from Pokhara University.
- Received partial scholarship due to good performance in high school.

#### **Publications**

• Research paper: Comparative study on OMR(Optical mark recognition) - on NASCOIT, Nepal. Author(s): Bhoj Bahadur Karki and Nirman Giri, year published: 2018

## **Trainings**

- Game development program in C# organized by Microsoft Innovation Centre, Nepal
- Android app development training organized by Nepal Engineering College(NEC)
- Web development using PHP and JavaScript organized by NEC

#### References

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