

# KRITISH PAHI

📍 Chicago, IL 📞 901-297-5709 ✉ [kritishpahi@gmail.com](mailto:kritishpahi@gmail.com) [in kritish-pahi](#) [@kpahi](#)

## SKILLS

**Languages:** Golang (2+years), Python (3+years), Java, SQL, Bash, LaTeX  
**Web Technologies:** Django, Flask, FastAPI, jQuery, Node.js, Vue.js, HTML, CSS  
**Database:** PostgreSQL, Redis, DynamoDB (NoSQL), Elasticsearch  
**DevOps:** Terraform, CloudFormation, Docker, Kubernetes, Ansible, Jenkins, AWS  
**Tools:** Git, Jira, Bitbucket, Postman, Linux, REST API, JSON

## EDUCATION

**University of Memphis**, Master of Science, Computer Science CGPA: 4.0 2024 Memphis, TN, USA  
**Tribhuvan University**, Bachelor of Technology, Computer Engineering Grade: 76% 2017 Kathmandu, Nepal

## WORK EXPERIENCE

### University of Memphis

Jan 2022 – Current

Graduate Research Assistant

Memphis, TN

- Developed **JupyterLab Extensions** using Python and Golang with PostgreSQL to enhance the experience of in-class coding exercises by enabling real-time sharing of code snippets and code feedbacks between instructor and students.
- Designed and deployed classifier model to classify TAs' feedback into 5 categories with 94% accuracy. The model was integrated into the tutoring app developed as Sublime plugin.

### CloudFactory

Oct 2019 – Dec 2021

Software Engineer

Kathmandu, Nepal

- Conducted POCs on diverse **AWS services** such as Private Link, Elasticsearch Index Life Cycle Management, ECS, DAX, API Gateway and Kinesis Stream to address and integrate new business requirements.
- Designed pipeline infrastructure using CloudFormation to process and store time-series data in real-time. The system integrated Kinesis Stream, Lambda, Glue job, RDS and QuickSight dashboard.
- Initiated the development of CLI tool to facilitate deployment of ECS services and Lambdas across multiple services.
- Designed and developed APIs in Golang with multi-threading to retrieve data from multiple endpoints that required VPC peering.
- Enhanced API resilience by achieving 80% code coverage with unit tests and incorporating integration tests with the use of mock services.

### Itonics Innovation

Apr 2018 – Sep 2019

DevOps Developer

Kathmandu, Nepal

- Automated infrastructure provisioning for microservices with **Terraform** in multi-stage environments using CI/CD pipelines in AWS.
- Managed a cluster of EC2 instances with more than 50 servers as web servers using Ansible and wrote playbooks to support and update the servers.
- Developed Python script to track and automate the process of creating, assigning and updating recurrent tickets in Jira for quarterly audit purpose.

### Tekvortex Pvt. Ltd.

Sep 2017 – Apr 2018

Software Developer

Kathmandu, Nepal

- Developed a distributed news site crawler using Python Scrappy framework that scales with load to crawl thousands of sites with **RabbitMQ** as the message broker and **Celery** as the operational node in ECS services.
- Worked on a team of 3 as a full-stack developer using Django and Vue framework to develop a user-friendly interface to define custom rules for crawlers and to manage the processed articles with Elasticsearch and DynamoDB.

## PUBLICATION

- Enhancing Active Learning through Collaboration Between Human Teachers and Generative AI**  
*Computers and Education Open, 2024*
- A Cloud-Based Technology for Conducting In-class Exercises in Data Science and Machine Learning Courses, SIGCSE, 2023**

## AWARDS AND EXTRACURRICULAR

- Instructor, 3 Days AWS Training, 2021:** Conducted a training session for new team members at CloudFactory on building and deploying applications in AWS with CloudFormation.
- Organizer, Hack-A-Week, 2017:** Planned and organized a week-long event for computer science enthusiasts to ideate and develop their app.