Pratiksha Shrestha

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SUMMARY

Software developer with 5+ years of experience building applications for e-commerce, resource and data management. Proficient in Python, Node.js, JavaScript, React, MySQL, MongoDB, and AWS with expertise spanning front-end, back-end, and RESTful web services. Demonstrated skills in OOP concepts, microservices and serverless architecture, and Solidity development for Web3 DApps in blockchain. Experienced on using version control systems such as Git, bitbucket, GitLab for continuous integration and development.

TECHNICAL SKILLS

Languages & Runtime Env: Python, JavaScript, TypeScript, Node.js, PHP, C++, Solidity, Shell Script
Frameworks & Packages: Express.js, React.js, Vue.js, Laravel, jQuery, Selenium, Chai, NPM, Gradle, Gulp, Knex.js, Numpy
Databases: MySQL, MongoDB, MariaDB, DocumentDB, Oracle Autonomous Database
Software/Technology: Amazon Web Services (AWS Lambda, Batch, RDS, EC2, S3, ECS, Cognito, CloudWatch, CodePipeline, CodeDeploy, SNS, SES), Microservices, Redis, Agile, Database Optimization, Git, Linux, Docker, CI/CD, Ajax, XML

WORK EXPERIENCE

Full-Stack Developer (Graduate Assistant) | *Myaamia Center, Miami University, Ohio* **August 2022 – Present**
- Designed and built intuitive web admin panel for tribal language revitalization, enhancing engagement and accessibility
- Led **database architecture design** and development for a dynamic survey management and data analysis platform. Supported **10+ surveys**, implementing **advanced filtering, sorting**, and **data mapping** across interconnected survey datasets.
- Developed a tool for efficient multipart uploads and **streamed downloads** for large files on AWS S3, effectively **preventing web wait timeout** issues.
- Migrated from traditional server to **AWS cloud services** with zero server downtime and data loss

Tech Stack: *Laravel, PHP, jQuery, JavaScript, Python, AWS, MariaDB, Docker, Rest API, Puppet*

Software Developer | *Proshore, Netherlands (From Proshore Nepal)* **March 2019 – June 2022**
- **Led** development of B2B web applications in **cross-functional team of 7-10 members** following **Agile SCRUM** approach
- Achieved **400% performance boost** with targeted **database optimization** & codebase enhancement (5x faster response time)
- Implemented **factory pattern** with **multi-threading** for efficient large database parsing in Python **batch jobs**
- **Optimized SQL queries**, re-indexed tables, implemented **client-server** database model with **database partitioning** and **sharding** along with Redis cache for frequently accessed data to reduce server load and improve performance
- Implemented e-commerce **data synchronization** across 4 third-party vendor systems for improved data accuracy & efficiency
- Migrated **legacy** monolithic application to **microservices** model hosted in **AWS EC2** using AWS Gateway API
- Engineered **continuous deployment** pipeline reducing deployment time by 70% with improved release and rollback process

Tech Stack: *Node.js, Python, JavaScript, MySQL, DocumentDB, AWS, Docker, Kubernetes, Redis, jQuery, Vue.js, Knex.js, Express.js, Mollie API, REST API, Filezilla, FTP, SMTP, cXML, Jira, Postman, Selenium, Chai*

Associate Software Engineer | *GrowByData Services Pvt. Ltd* **August 2018 – February 2019**
- Researched and implemented **search engine optimization** strategies resulting in increased visibility of e-commerce stores
- Incorporated search engine spidering, crawling, indexing and set up tests and campaigns for **A/B testing** and report generation
- Developed client-requested features on sites hosted in e-commerce platforms

Tech Stack: *JavaScript, Node.js, jQuery, Shopify, BigCommerce, Magento, ABTasty, Screaming Frog, Google Tag Manager*

EDUCATION

Master Of Science in Computer Science **August 2022 – May 2024 (Expected)**
Miami University of Oxford, Ohio CGPA: 4.00/4.00 (Ongoing)

B.E. Computer Engineering **August 2014 – October 2018**
Kathmandu University, Nepal CGPA: 3.63 /4.00

LEADERSHIP

Women Leaders in Technology (WLiT) | *Technical Committee Member/ Instructor* **August 2018 – June 2022**
- Conducted web development sessions in Node.js, JavaScript and jQuery at WLiT bootcamp 2020/21, and 2021/22
- Mentored undergraduate female students, guiding them towards their professional aspirations and nurturing leadership abilities

PROJECTS

Review Rewards | *Solidity, TypeScript, React.js, Node.js, OracleDB, EVM, NFT, Hardhat, zkSNARK, SBT, OpenGSN*
- Developed and deployed secure, privacy-focused web3 application for academic peer review on blockchain
- Implemented Soul Bound Tokens (SBT); non-transferable NFTs to recognize reviewers for their contribution
- Wrote unit tests to compute accuracy and gas efficients of Solidity smart contracts

suggestABook | *Python, JavaScript, Node.js, React.js, Flask, Numy, Pandas*
- Book recommendation system utilizing Collaborative Filtering approach
- Applied k-Nearest neighbor approach on user-item sparse matrix to offer tailored book recommendation based on current read