DIPESH PRADHAN
Senior Full Stack Developer/ Technical Architect

Experienced full stack developer and technical architect, with a passion for technology and innovation. I've led teams on challenging projects, from loan processing systems to multi-cloud management platforms. With a PhD in software engineering and a focus on AI and machine learning, I'm always looking for the best solutions to complex problems.

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Work Experience

Senior Full stack Developer & Technical Architect
[Sopra Steria, Norway]   Aug 2021 - Present

Sopra Steria is Norway's leading consulting company in digitalization.
Role Description: I am working as a consultant for a public agency.
Tech Stack: Java, Kotlin, React, Typescript, UML, Postgres, REST, GraphQL, Kafka, Redis, ELK stack, Prometheus, Sentry, Grafana, Azure AD, Google Cloud, Kubernetes, Github, Github Actions, Jira, ABAC, UU.

Technical Lead
[TietoEVRY, Norway]   Aug 2019 – July 2021

I worked in the Loan Process department, which is a part of the financial department of TietoEVRY. The department creates a solution for processing loans and credit applications for both the private and corporate markets. More than 35 banks use this solution in Norway and Finland.
Role Description: My responsibilities included overseeing the development and design of the loan processing system, as well as modernizing existing components. In addition to setting common standards in the department, I also introduced new technologies such as Kubernetes. I led the migration of 300+ applications and components from SVN to GIT and built and maintained a unified CI/CD Jenkins pipeline. I also created an internal tool to monitor project quality and organized competence forums, mentored other developers, and helped to reduce technical debt.
Tech Stack: Java, React, Go, UML, Oracle, REST, SOAP, GraphQL, Jenkins, ELK stack, Kubernetes, IBM Cloud Private, Apache CXF.

Research Engineer (Developer and Architect)
[Simula Research Laboratory, Norway]   Sept 2019 – Nov 2019 (20%)
                                              Sept 2018 – July 2019

I worked in the [MELODIC project], which is a European Union sponsored project to develop a multi-cloud management platform. This project aimed to develop a framework for using the most cost-effective cloud service from different cloud services, for example, AWS, Azure, and Google Cloud.
Role Description: I developed services using Java and Spring Boot for data lifecycle management. In addition, I utilized different algorithms such as affinity propagation and retrieved data from cloud storage providers such as Amazon S3. Afterwards, the data with Alluxio was distributed and produced statistics of the solution efficiency. I also experimented with different cloud services using machine learning and published two research papers, one of which won a best paper award.
Tech Stack: Java, Python, Spring Boot, Docker, Postgres, Clustering, Affinity Clustering, Tensorflow, Azure, Google Cloud Platform, Amazon Web Services, Amazon S3 Bucket, Java Message Service, Scikit-learn, Keras, Alluxio, Git.

Phd Research Fellow (Developer)
[Simula Research Laboratory, Norway]   Sept 2015 – Aug 2018

Education

PhD in Informatics: Software Engineering
- [University of Oslo, Oslo, Norway]
- Aug 2015 – July 2018

MS in Informatics: Programming and Network
- [University of Oslo, Oslo, Norway]
- Aug 2013 – July 2015
- Grade A

BEng in Information Technology
- [Metropolia UAS, Helsinki, Finland]
- Aug 2008 – Dec 2011
- Grade B

Technical Skills
- **Front-End Development**
  HTML, CSS, JavaScript, TypeScript, React
- **Back-End Development**
  Java, Kotlin, Go, Python, Groovy
- **Databases**
  MySQL, PostgreSQL, Oracle, MongoDB
- **Cloud Platforms**
  Azure, Google Cloud, AWS, IBM Cloud Private
- **Infrastructure Technologies**
  Kubernetes, Docker, Alluxio
- **Logging and Monitoring**
  ELK Stack, Prometheus, Sentry, Grafana
- **Java Frameworks**
  Spring Boot, Spring, Apache CXF, JAX-RS, JSP
- **Build, SCM, and CI Tools**
  Maven, Gradle, Git, Jenkins, Github Workflow
- **Testing Tools**
  Junit, Mockito, Selenium
- **API Technologies**
  REST, GraphQL, SOAP
- **Message Queues**
  Kafka, JMS
- **Collaboration Tools**
  Slack, Teams, Jira, Confluence, UML, Whiteboard

Certifications
- [Microsoft DevOps Engineer Expert (AZ-400)]
- [Microsoft Azure Developer Associate (AZ-204)]
- [Microsoft Azure Data Fundamentals (DP-900)]
- [Microsoft Azure AI Fundamentals (AI-900)]
- [Microsoft Azure Fundamentals (AZ-900)]
- [ISTQB Certified Tester Foundation Level (CTFL)]

[in LinkedIn Profile]   [Google Scholar]   [GitHub]   [Personal Web Page]

I worked in the [Certus project](), which stands for Certus Center for Software Validation and Verification. Certus was an 8-year research project involving Simula Research Laboratory as host institution and industrial partners such as ABB Robotics, Cisco Systems Norway, and Kongsberg Maritime.

Role Description: I worked as a scientific partner in [Cisco Systems Norway](), where I applied artificial intelligence techniques and machine learning to optimize test procedures for large-scale systems. For proof of concepts, I also used case studies from other partners (e.g., ABB Robotics) through Certus and open source projects. Finally, I obtained a PhD and published seven papers in top software engineering conferences and journals, as well as completing various research assignments. The focus of his research was Evolutionary Computation Based Test Optimization of Large-Scale Systems. In addition, I supervised interns.

Tech Stack: Java, R, UML, Postgres, Git.

Research Trainee and Graduate Student Researcher

[Simula Research Laboratory, Norway]()   Jan 2014 – Aug 2015

Role Description: I leveraged the latest techniques in model-based and search-based software engineering to tackle real-world problems in the industry. I rigorously evaluated the results through empirical studies and demonstrated the efficacy of his approach. The practical implementation of his solution was deployed and tested in a cloud environment, showcasing its ability to handle complex software systems. In addition, I conducted extensive research on black-box regression testing optimization and successfully developed a cutting-edge tool that generates optimal test cases based on various testing objectives.

Tech Stack: Java, Python, R, Postgres, Jupyter Notebook, Numpy, Scikit-learn, Keras, Pandas, Weka, Git.

QA Engineer

[Enoro, Finland]()

Jan 2014 – Dec 2014 (50%)
April 2011 – Aug 2013

Role Description: I was involved in various aspects of software testing, including test planning and execution in an Agile/Scrum environment, creating and automating test cases, and performing performance testing. I worked closely with developers, demonstrated the product to customers, and gave training and presentations to colleagues. I was also responsible for maintaining the test environment and updating servers. Additionally, I implemented a mobile application for energy data management and created defect reports. Dipesh's responsibilities also included updating the test documentation.

Tech Stack: Visual Basic, Selenium, Oracle, TestTrack, Jira, Git, iMacros, SoapUI, AutoIt, In-house Test Automation Tool.

Web Developer Trainee

[Mountdigit Technology, Nepal]()   June 2010 – Aug 2010

Role Description: I utilized my expertise in HTML, CSS, Javascript, PHP, and MySQL to develop websites.

Interests

I value the time I get to spend with his family and cherish the memories we create together. I enjoy taking scenic walks on the forest and immersing himself in nature. I am always seeking to expand his knowledge and stay updated on the latest advancements in technology. I also have a keen interest in history and is inspired by movies that are based on real-life events.

Trainings

- **Google Professional Cloud Architect**
  - Google
  - April 2023 (ongoing)
- **Arkitektskolen**
  - Sopra Steria
  - Feb 2022 – Oct 2022
- **Certus biannual workshops**
  - Certus
  - Jan 2015 – Aug 2018
- **Data Science: Data to Insights**
  - MiT – Professional Education
  - Oct 2016 – Nov 2016
- **Introduction to Databases**
  - Stanford University Online
  - Jan 2013 – March 2013
- **Summer school in Network Security and Forensics**
  - Universität Rostock, University of Tartu, Universität Bremen, Universität zu Lübeck, Hochschule für Technik und Wirtschaft Dresden
  - July 2012 – Aug 2012

Lectures Conducted

- Semantic versioning
- Git Guidelines
- Technical Debt, Reliability, and Security
- Introduction to Kubernetes
- Git, jenkins, and releases
- Standard Jenkinsfile for CI/CD
- Using jasypt asymmetric encryption
- Clean code
- Deployment and load balancing
- CI and CD

Academic Services

Reviewed papers for several well-reputed international journals and conferences both as a reviewer and a sub-reviewer.

Personal Skills

- Problem-solving
- Detail-oriented
- Team player
- Precise communication
- Quick learner and good teacher
- Leadership

Languages

- English (Proficient)
- Norwegian (Working proficient – B2)
- Nepali (Native)
- Hindi (Proficient)