

Suresh Kumar Mukhiya

Curriculum Vitae

Education

- 2018–2021 **Ph.D.**, *Western University of Science and Technology*, Norway.
2018, Thesis: Personalized Treatment of Mental Health problems using Adaptive Technology, www.intromat.no, Doctoral degree awarded on 21st September, 2021
- 2014–2016 **Masters In Information System**, *Norwegian University of Science and Technology*, Norway, *Average Grade: B*.
2014–2016, Thesis: Predicting The Next Click With Web Log Process Mining
- 2008–2013 **Bachelor In Computer Science and Information Technology**, *Tribhuvan University, Kathford International College of Eng. and Mgmt.*, Nepal, *Grade: 91.6%*.
Awarded Nepal Board Topper, Gold Medalist
- 2005–2007 **Higher Secondary Education Board (HSEB)**, *Caspian Valley College*, Nepal, *Grade: 83.5%*.
- 2003–2004 **School Leaving Certificate (SLC)**, *Lalitpur Secondary English Boarding School*, Nepal, *Grade: 84.24%*.

Research Publications

- Journal paper **An HL7 FHIR and GraphQL approach for interoperability between heterogeneous Electronic Health Record systems**, *Health Informatics Journal*, *Authors: Kumar Mukhiya, Lamo, Y.*
<https://doi.org/10.1177/14604582211043920>
- Book chapter **Artificial Intelligence in Mental Health**, *Artificial Intelligence: Models, Algorithms and Applications*, 2021, Mukhiya, S. K., Aminifar, A., Rabbi, F., Pun, V. K. I., & Lamo, Y..
<https://doi.org/10.2174/97816810882661210101>
- Journal paper **Attention-based Deep Entropy Active Learning using Lexical Algorithm for Mental Health Treatment.**, *Frontiers in Psychology*, *Authors: Ahmed, U., Kumar Mukhiya, S., Lin, J. C.-W., Srivastava, G., & Lamo, Y.*
<https://doi.org/10.3389/FPSYG.2021.642347>
- Journal paper **Adaptive Elements in Internet-Delivered Psychological Treatment Systems: Systematic Review**, *JMIR*, *Authors: Suresh Kumar Mukhiya, Jo Dugstad Wake, Yavus Inlal, Ka I Pun, Yngve Lamo.*
<https://www.jmir.org/2020/11/e21066>

- Conference paper **Efficient Mining of Pareto-Front High Expected Utility Patterns**, Trends in Artificial Intelligence Theory and Applications. Artificial Intelligence Practices. IEA/AIE 2020. Lecture Notes in Computer Science, vol 12144. Springer, Cham., *Authors: Usman Ahmed, Jerry Chun-Wei Lin, Jimmy Ming-Tai Wu, Youcef Djennouri, Gautam Srivastava, Suresh Kumar Mukhiya.*
https://doi.org/10.1007/978-3-030-55789-8_74
- Conference paper **Adaptation of IDPT System Based on Patient-Authored Text Data Using NLP.**, 2020 IEEE 33rd International Symposium on Computer-Based Medical Systems (CBMS), *Authors: Suresh Kumar Mukhiya, Usman Ahmed, Fazle Rabbi, Ka I Pun, Yngve Lamo.*
<https://doi.org/10.1109/CBMS49503.2020.00050>
- Journal paper **Adaptive Systems for Internet-Delivered Psychological Treatments**, IEEE Access, *Authors: Suresh Kumar Mukhiya, Jo Dugstad Wake, Yavus Inlal, Yngve Lamo.*
<https://doi.org/10.1109/ACCESS.2020.3002793>
- Conference paper **Designing Chatbots for Guiding Online Peer Support Conversations for Adults with ADHD**, CONVERSATIONS 2019. Lecture Notes in Computer Science, vol 11970. Springer, Cham, *Authors: Oda Elise Nordberg, Jo Dugstad Wake, Emilie Sektnan Nordby, Eivind Flobak, Tine Nordgreen, Suresh Kumar Mukhiya, Frode Guribye.*
https://doi.org/10.1007/978-3-030-39540-7_8
- Conference paper **A GraphQL approach to Healthcare Information Exchange with HL7 FHIR**, DOI: 10.13140/RG.2.2.22981.19680, Elsevier Science in the open-access Procedia Computer Science series on-line (2019)., *Authors: Suresh Kumar Mukhiya, Fazle Rabbi, Ka I Pun, Adrian Rutle, Yngve Lamo.*
<https://doi.org/10.1016/j.procs.2019.11.082>
- Workshop paper **An architectural design for creating self-reporting e-health systems**, DOI: 10.13140/RG.2.2.14802.30404, In ICSE 2019 Proceedings in the IEEE Digital Library (2019)., *Authors: Suresh Kumar Mukhiya, Fazle Rabbi, Ka I Pun, Yngve Lamo.*
<https://doi.org/10.1109/SEH.2019.00008>
- Journal paper **An Architectural Style for Single Page Scalable Modern Web Application, 5(4), 6-13**, International Journal of Recent Research Aspects ISSN: 2349-7688, *Authors: Suresh Kumar Mukhiya, Hoang Khac Hung.*
<https://www.ijrra.net/Vol5issue4/IJRRRA-05-04-02.pdf>
- Workshop Poster **An architectural design for creating self-reporting e-health systems**, Awarded as Best Poster, 2nd Bergen-Budapest Workshop on Qualitative and Numerical Aspects of Mathematical Modelling), *Authors: Suresh Kumar Mukhiya, Fazle Rabbi, Ka I Pun, Yngve Lamo.*
<https://doi.org/10.13140/rg.2.2.14802.30404>

- Master Thesis **Predicting The Next Click With Web Log Process Mining**, *This thesis proposes a methodology for revealing deep content interaction models from real life web logs. The methodology is applied on web log data from Adresseavisen, a regional news publisher in Norway.*, Norwegian University of Science and Technology (NTNU), Supervisors: Gulla, Jon Atle & Ingvaldsen, Jon Espen.
<http://hdl.handle.net/11250/2411539>
- Master Project **User Segmentation: Revealing User Characteristics From Interaction Logs**, Norwegian University of Science and Technology (NTNU), Supervisors: Gulla, Jon Atle & Ingvaldsen, Jon Espen.

Technical Book publication

- Data analytics, Python **Hands-on Exploratory Data Analysis**, March 2020, Packt Publishing Limited, Suresh Kumar Mukhiya, Usman Ahmed.
 Packt Publication
- Big Data & Machine Learning **Hands-on Big Data Modeling**, 2018, Packt Publishing Limited, Co-authors: James Lee, Tao Wei, Suresh Kumar Mukhiya.
<https://www.amazon.com/Hands-Big-Data-Modeling-professionals-ebook/dp/B07FDLQVQZ/>
- React, Redux **Redux Quick Start Guide**, 2019, Packt Publishing Limited, Co-authors: James Lee, Tao Wei, Suresh Kumar Mukhiya.
<https://www.amazon.com/Redux-Quick-Start-Guide-beginners-ebook/dp/B07P9H3C72>

Work Experience

- 2021(August)-present **Senior System Developer**, [HTTPS://WWW.TRYG.NO/](https://www.tryg.no/), Bergen, Norway.
 Currently, working as a system developer to design, create and deploy system for insurance company.
- 2018-2021 (July) **PhD Candidate**, [HTTPS://WWW.HVL.NO](https://www.hvl.no), Bergen, Norway, Worked as a PhD candidate at HVL..
 The study attempted to use Model-based Software Engineering, design thinking and AI approaches to create adaptive treatments systems for mental healthcare.
- 2017 - 2018 **Frontend Developer, (Remote)**, [HTTPS://FESTPOP.COM/](https://festpop.com/), FestPop, Inc, 110 W 9TH ST Kansas City, MO 64105.
 The company has been engaged in listings of festivals all over the world and giving best user experience of Recommendation System based on user preferences. The company uses *Reactjs, redux, react-router, redux-saga, nodejs* etc as front-end technologies to build the Web Application. In addition to this, the company uses MySQL to handle database.
- 2016 - 2018 **Frontend Developer, (Remote)**, [HTTPS://WWW.LANDED.COM/](https://www.landed.com/), Landed, Inc. DRE, San Francisco.
 Landed is a company with the mission to help essential professionals build financial security near the communities they serve. The company uses *Reactjs, redux, react-router, redux-saga, nodejs* etc as front-end technologies to build the Web Application. In addition to this, the company uses PostgreSQL to handle database.

- 2016(June)– **Frontend Developer**, [HTTPS://WWW.24NETTBUTIKK.NO/](https://www.24NETTBUTIKK.NO/), Sincos Software AS.
 2017(July) 24estore is a Norwegian company that develops e-commerce solutions for customers around the world. The company uses *Reactjs*, *redux*, *react-router*, *redux-saga*, *node* etc as front-end technologies and Laravel for building API. The development team follows TDD paradigm and uses SCRUM as project management tool.
- 2015–2016 **Web Developer**, NOWHOW AS, Munkebyvegen 254, 7608 Levanger, Norway.
 Responsible of design and development of Learning Management System using WordPress in multisite environment. Developed ad-dons and plugins that are compatible with LearnDash LMS plugin that integrates with the system.
- 2013–2014 **WordPress Developer**, CODEBOX, <http://www.gocodebox.com>, Remote Work.
 Development of websites using their theme framework *PushPress* developed for WordPress.
- 2010–2016 **Freelancer**, WWW.UPWORK.COM.
 Worked as full time (till 2014) and now part time freelancer in upwork, providing services like:
- Website development and designing
 - WordPress theme development and customization
 - WordPress plugin development and customization
 - Web application development consulting services
 - Search Engine Optimization
 - Website troubleshooting and maintenance service including web security

Skills and Training

- Python stacks **Artificial Intelligence**, INTERMEDIATE.
- Exploratory Data Analysis using Pandas, SciKit-Learn, SciPy, Seaborn, matplotlib,
 - Working knowledge of classical Machine Learning algorithm using Scikit-learn, SciPy, Numpy, Keras, Pandas, Matplotlib
 - Working knowledge of classical ML and neural network using TensorFlow 2.0.
 - Interested in Natural Language Processing and Understanding
- JS **Client-site Script**, ADVANCED.
- Frameworks
- Better understanding of JavaScript and TypeScript,
 - Working knowledge of *ReactJS*, *GraphQL*, *React Query*, *XState*, and others
 - Test frameworks like *Jest*, *Cypress*, etc
- CSS **Cascading Style Sheets**, ADVANCED.
- Frameworks
- Working knowledge of CSS frameworks like *Material UI*, *Tailwind CSS*, *Bootstrap*, *Foundation*, *Ant Design* and *UIKit*
 - Working knowledge of SCSS and LESS
- WordPress **Content Management System**, ADVANCED.
- Themes and Plugins Development and customization
 - WordPress security and troubleshooting
 - Search Engine optimization
- Server-side scripting **Server site Scripting Language and Database**, ADVANCED.
- Good Concepts of Object Oriented Programming paradigm and working knowledge with MYSQL database with PHP
 - Have working knowledge with NodeJS, Express and MongoDB.

- SEO **Search Engine Optimization**, ADVANCED.
- On-Page and off -page optimization
 - Link building, back-link building, directory submission, content optimization, blog commenting, book marking, social book marking, etc
 - Search Engine Marketing (SEM)
 - Search Media Marketing (SMM)
- Others **Modeling Languages**, BASIC.
- Business Process Modeling Notation (BPMN, and the XML form BPML)
 - Flowchart
 - Unified Modeling Language (UML)
 - Domain Specific Modeling (DSM) especially using DSL(Domain Specific Language).

Awards

- 2014-2016 Quota Scholarship by Norwegian Lånekassen.
- 2013 Awarded Nepal Board Topper, **Vice Chancellor Award**, Tribhuvan University.

Certifications

- Certified Scaled Agile Inc, Certified SAFe 5 Architect, Issued by *Scaled Agile Inc*,
SAFe5 Agile <https://www.credly.com/badges/faf7a4b6-e5c1-49e2-9b8e-454d4902e204>
Software Engineer
- Certified Scaled Agile Inc, Certified SAFe 5 Architect, Issued by *Scaled Agile Inc*,
SAFe5 <https://www.credly.com/badges/4c7bff00-3e2e-4f11-836e-92135d35a6e5>
Architect
- Data Analysis EDX.ORG, Verified Certificate for **Statistical Thinking for Data Science and Analytics**, <https://courses.edx.org/certificates/05fe1ae951d84c44a8d6d92ac42d983d>
- Responsive Website Responsive Website Basics: Code with HTML, CSS, and JavaScript by **University of London & Goldsmiths, University of London** on Coursera. Certificate earned on February 2, 2016
- Bootstrap Front-End Web UI Frameworks and Tools by **The Hong Kong University of Science and Technology** on Coursera. Certificate earned on January 13, 2016
- HTML, CSS and JavaScript by **The Hong Kong University of Science and Technology** on Coursera. Certificate earned on January 13, 2016
- Interactivity with JavaScript by **University of Michigan** on Coursera. Certificate earned on January 24, 2016
- CSS3 Introduction to CSS3 by **University of Michigan** on Coursera. Certificate earned on January 15, 2016
- HTML5 Introduction to HTML5 by **University of Michigan** on Coursera. Certificate earned on January 21, 2016

Reference Links

Github <https://github.com/sureshHARDIYA>
linkedin <https://www.linkedin.com/in/suresh-kumar-mukhiya-65182a35/>
Personal Website <https://www.skmukhiya.com.np/>
WordPress Plugins <https://profiles.wordpress.org/sureshhardiya/#content-plugins>
Upwork <https://www.upwork.com/users/0182e0779315e50896>

Languages

Maithali	Mothertongue	
Nepali	National Language	<i>Expert</i>
English	Expert	<i>Good Communication, and Written Skills</i>
Hindi	Intermediate	<i>Good Communication skills</i>
Norwegian	Beginners	<i>Can comprehend and speak a bit. Passed A2 level.</i>

Interests

- Blogging	- Writing
- Programming	- Photography
- Hiking	- Reading