

# PRIYANKA NAGABHUSHANA

## Project data manager

📅 27 Nov 1991 🇮🇳 Indian 🇨🇭 Swiss- B work permit 📍 Zurich, Switzerland  
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## EXPERIENCE

### Project Data Manager

#### Inselspital

📅 Bern, Switzerland 📍 Nov 2022 – Present

- Involved in writing manuscripts for publication, writing code to perform cohort-specific case-control patient selection with incidence density sampling, and analysis of genetic data.
- Collecting pharmacogenomics data from STCS (Swiss Transplant Cohort Study), SHCS (Swiss HIV Cohort Study), and SCQM (Swiss Clinical Quality Management).

### Thesis

#### Inselspital

📅 Bern, Switzerland 📍 Dec 2021 – June 2022

- Developed a GUI that works on both Windows and macOS to generate accreditation-ready reports, including advanced statistical comparison tables, regression plots, and Bland-Altman plots, assisting practitioners of medicine, pharmacy, and researchers in running standard routines in method verification.
- The GUI was developed in Python using Tkinter and can take inputs as CSV and produce accreditation-ready reports in PDF format.

### Four-Weeks Project

#### Institute of Pathology

📅 Bern, Switzerland 📍 Sep 2021 – Oct 2021

- Segmented the tumor region in whole slide images of Triple Negative Breast Cancer (TNBC) using a deep learning model.
- Manually annotated digitized images using QuPath software and exported annotations into GeoJSON format.
- Processed high-resolution images into small patches and associated masks for training and testing the deep learning model.
- Achieved a final model performance of around 82% accuracy.

### Assistant Manager

#### Sri Vijayalakshmi Engineering

📅 Bangalore, India 📍 May 2016 – Aug 2019

- Managed product orders, ensured timely delivery, and handled payroll, manufacturing, and tax.
- Utilized tools like Tally and Microsoft Excel for efficient management.

### Lecturer of Mathematics and Science

#### Arvind International School

📅 Tumkur, India 📍 June 2015 – April 2016

- Taught Science to secondary school students and Mathematics (Calculus, Trigonometry, Algebra, etc.) to higher secondary school students.

## SKILLS



**Deep Learning**  
PyTorch



**Computer Vision**  
OpenCV



**Machine Learning**  
Scikit-learn



**Data Manipulation and Analysis**  
NumPy, Pandas



**Database Management**  
SQL



**Programming Languages**  
R, Python, MATLAB, CAD, KEIL (8086, 8051)



**Computer Tools**  
Microsoft Office (Excel, Word, PowerPoint), VMWare



**Operating Systems**  
Windows, Mac, Linux

## EDUCATION

### Master's in Bioinformatics and Computational Biology

#### University of Bern

📅 September 2019 – August 2022

Thesis: Deployment of an Automated Method Verification Software Project: Applications of Machine and Deep Learning on Digital Pathology Images  
Grade Obtained: 5.5 / 6.0

### Bachelor of Engineering in Biomedical Engineering

#### Visvesvaraya Technological University

📅 September 2009 – June 2013

Thesis 1: Traffic Control System Using NXP Microcontroller  
Thesis 2: MEMS-based Drug Delivery System  
Grade Obtained: 5.0 / 6.0

## AWARDS AND HONORS



**Best Teacher Award**  
Arvind International School, 2016

- Graded assignments and tests for the students.

## Product Specialist/Application Specialist

### Ayuh Meditech Solutions Pvt Ltd.

📍 Bangalore, India

📅 Jan 2013 – Jan 2015

- Gained technical expertise in the company's medical devices and served in the service and system engineering team.
- Responsible for the sale of the company's technical products to various hospitals and presented medical products to clients, resolving their queries.
- Collected feedback on existing and new products and conducted competitive analysis.

## Internship

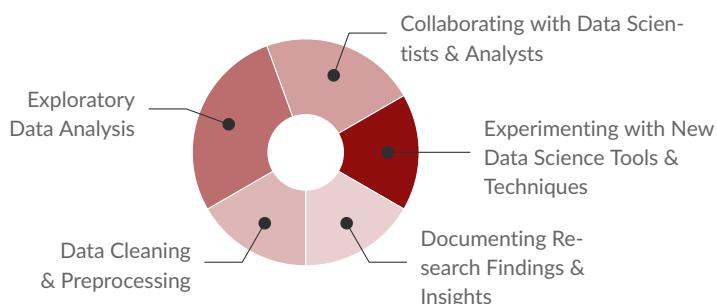
### Pro Square Infotech

📍 Bangalore, India

📅 March 2013 – June 2013

- Part of a team that developed a MEMS-based drug delivery system, involving programming a PIC Microcontroller using assembly language.
- Utilized tools like C, embedded system programming, and GSM module for the project.

## A TYPICAL DAY



### Best Performer Award

Achieving the Production Target in 2 Months Instead of 3 Months, 2015



### Award for Best Classical Dance Performance

2005

## LANGUAGES

English  
Kannada  
Hindi  
German



## PUBLICATIONS



### Journal Articles

- P. Nagabhushana, C. Rütsche, C. Nakas, and A. B. Leichtle, "Deployment of an automated method verification - graphical user interface (mv-gui) software," *MDPI-BioMedInformatics*, 2023.
- P. Nagabhushana, C. Rütsche, C. Nakas, and A. B. Leichtle, "Digital health, big data and smart technologies," *Clinical Chemistry and Laboratory Medicine (CCLM)*, vol. 61, no. s1, s968–s986, 2023. DOI: doi:10.1515/cclm-2023-7045.
- H. Witte, T. U. Blatter, P. Nagabhushana, et al., "Statistical learning and big data applications," *Journal of Laboratory Medicine*, no. 0, 2023.



### Conference Proceedings

- P. Nagabhushana, C. Rütsche, C. Nakas, and A. B. Leichtle, "Method verification - graphical user interface software," in *Worldlab - Euromedlab Roma 2023*, vol. 61, 2023.
- P. Nagabhushana et al., "Participated in national level student's symposium, bme explore-2012," in *BME Explore-2012*, Davangere, India, 2012.
- P. Nagabhushana et al., "Participated in short term training on biomedical instrumentation and techniques of medical imaging and diagnosis," in *Short Term Training on Biomedical Instrumentation and Techniques of Medical Imaging and Diagnosis*, Mumbai, India, 2012.
- P. Nagabhushana et al., "Participated in national level technical symposium, bionix 2011," in *BIONIX 2011*, Chennai, India, 2011.
- P. Nagabhushana et al., "Presented traffic signal controls using nxp microcontroller at intercollege mini project competition impetus," in *Intercollege Mini Project Competition Impetus*, Bangalore, India, 2011.