

# Sambit Praharaj

PHD RESEARCHER AT WELTEN INSTITUTE IN TECHNOLOGY ENHANCED LEARNING AND INNOVATIONS GROUP

Valkenburg, Netherlands

☎ (+31) 653546672 | ✉ sambit\_praharaj@yahoo.com | 🏠 sambit2.github.io/ | 📱 sambit2 | 🌐 sambitpraharaj

“The greatest danger for most of us is not that our aim is too high and we miss it but that it is too low and we reach it.” — Michelangelo

## Education

### Open Universiteit

Heerlen, Netherlands

PHD AT WELTEN INSTITUTE IN TELI GROUP IN MULTIMODAL LEARNING ANALYTICS

September 2017 - August 2021

(Expected)

- Working on Multimodal Learning Analytics in Collaborative Learning
- Use sensors to detect different multimodal indicators of collaboration during a collaboration task and enable real-time feedback to facilitate collaboration

### Delft University of Technology

Delft, Netherlands

MSC. IN COMPUTER SCIENCE, 7.37 (121 ECTS)

September 2015 - August 2017

- Collaborated with Lambda lab in WIS research group at TU Delft and researchers from Lugano, Switzerland for research
- Set up the experiment initially and converted the slides to be used for the lecture during the Bachelor's course (2016-17) at TU Delft
- Analyzed the data gathered from the event logs of the students in each lecture from different perspectives to determine the attention level and other study behaviour of students which can help in improving the current state-of the art classroom teaching
- Worked with different languages and database like R, HTML, CSS, JavaScript, MongoDB, Nodejs for experiment and analysis

### VSSUT Burla

Odisha, India

BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY, 8.74/10.00

2011-2015

- Major Project: Energy Efficient Routing in Wireless Sensor Networks

## Experience

### Mentor at VSSUT, Burla

Odisha, India

MENTOR IN PSPF (PROBLEM SOLVING AND PROGRAMMING FORUM)

July 2014 - June 2015

- Teach and guide our university juniors to program in Java and R and solve algorithmic problems

### Researcher at CNERG (Complex Networking Group), IIT Kharagpur

Kharagpur, India

UNDERGRADUATE RESEARCH INTERN

May 2014 - June 2014

- Performed research on the project titled as: “Measuring Similarity in Undirected, Unweighted Graphs”
- Simplified complex social and telecom networks which evolve with time
- Designed a combined similarity measure in Java after looking into different similarity measures which works well for most scenarios

### Trainee at NIIT Limited

Bhilai, Chattisgarh, India

CERTIFICATION FOR JAVA SE6, ASP.NET

June 2013 - July 2013

- Appeared for an exam and completed a project

### Internship at C&IT Dept., Bhilai Steel Plant, SAIL (Steel Authority of India Limited)

Bhilai, Chhattisgarh, India

SUMMER INTERNSHIP

May 2013 - June 2013

- Designed a short report just like a financial sheet which shows the Rail Steel Mill production in different financial years
- Used TOAD (Tool for Oracle Application Developers) to manage the SQL queries

### Trainee at NIIT Limited

Bhilai, Chhattisgarh, India

CERTIFICATION FOR SQL, PL/SQL FROM ORACLE

May 2012 - June 2012

- Appeared for an exam

## Projects

### Furnito - Furniture Search Engine & Recommendation System Project

TU Delft

PROGRAMMER AND DESIGNER

March 2016

- Designed a furniture search engine (with a team of 4 other members) which is basically a simple recommendation system based on user activity and crowd sourcing

### Energy Efficient Routing in Wireless Sensor Networks (WSN)

Odisha, India

MAJOR PROJECT IN FINAL YEAR OF BACHELOR'S AT VSSUT BURLA

August 2014 - May 2015

- Made a comparative study of different energy efficient routing algorithms in WSN
- Studied the existing algorithms and optimized it for better efficiency in the context of using the sensors for power supply in a city

## M3D Waste – Optimizing healthcare waste incineration

TU Delft

PREPARED AND PRESENTED A INNOVATIVE STARTUP IDEA

December 2015

- Worked with 5 other members where my role was to contact the potential NGOs and other organisations
- The basic idea of the startup was to be able to create a 3D printed incinerator for incinerating bio-medical wastes
- Our team won the first prize on the final presentation day

## Publications

### EC-TEL 2018 Springer LNCS (Lifelong Learning)

Leeds, UK

SAMBIT PRAHARAJ, MAREN SCHEFFEL, HENDRIK DRACHSLER AND MARCUS SPECHT. *Multimodal Analytics for*

September 2018

*Real-time Feedback in Co-located Collaboration*

- State-of-the-art-survey on using Multimodal Learning Analytics in Collaborative Learning and a pilot use-case study of giving real-time feedback during PhD meetings

### UMAP 2017 ACM (Track: Technology Enhanced Adaptive Learning)

Bratislava, Slovakia

VASILEIOS TRIGLIANOS, SAMBIT PRAHARAJ, CESARE PAUTASSO, ALESSANDRO BOZZON AND CLAUDIA HAUFF.

July 2017

*Measuring student behaviour dynamics in a large interactive classroom setting*

- Analysis of the data captured during all the 15 lectures for the paper which is also a part of my Master thesis

### DESOSA (Delft Students on Software Architecture)

TU Delft

CHAPTER ON EMBER: A FRAMEWORK FOR CREATING AMBITIOUS WEB APPLICATIONS

May 2016

- Chapter can be found here: <https://delftswa.gitbooks.io/desosa2016/content/ember.js/chapter.html>
- Chapter states the details about the software architecture of Ember.js repository which was a team work of 4 members
- Worked to communicate with the developers on Github and Slack and refactored part of the code on Github, contributed for chapter

## Skills

### Computer

PROGRAMMING, ANALYTICS, DATABASE AND DESIGN

- Programming: Java, C++, C#, Python, nodejs
- Analytics: R, Tableau
- Database: SQL, MongoDB
- Design: HTML, CSS, JavaScript

### Language & Writing

FLUENT IN ENGLISH, ORIYA

- English (Full professional proficiency)
- Oriya (Native or bilingual proficiency)
- Writing: Most viewed writer in Quora: TU Delft category since January 2017

## Extracurricular Activity

### GAM (Global Alumni Meet)

Odisha, India

ORGANIZING MEMBER AT VSSUT

January 2013

- Responsible for establishing contact with Alumni and invite them for the meet with the help of Facebook and Emails

### ECO-Club, Rourkela

Odisha, India

PARTICIPANT OF THE ENVIRONMENTAL AWARENESS DRIVE

June 2008

- Promoted environmental awareness among the locals on the occasion of World Environment Day by displaying meaningful posters and placards

### AIDS Awareness Workshop, Civic Centre, Rourkela

Odisha, India

PARTICIPATING MEMBER FOR RAISING AIDS AWARENESS

April 2006

- Raised awareness about AIDS as a participant of the workshop

## Honors & Awards

### INTERNATIONAL & DOMESTIC

2009 **1799 Rank**, International Mathematics Olympiad

India

2010 **36th Rank in RMO (Regional Mathematics Olympiad)**, Selected for INMO

India

## Hobbies

### Learn about Deep learning, Painting & Cooking

LEARN THE BASICS, PAINTING OIL COLOR, AVID COOK

- CNN (Convolutional Neural Networks), examples of deep learning on images
- Completed Junior Diploma in fine arts, fond of oil pastel and oil painting
- Watching cooking videos and experimenting with new dishes