

# Curriculum Vitae/Resume

## PALLABI BHOWMICK

[pbhowmic@iu.edu](mailto:pbhowmic@iu.edu) • <https://www.pallabibhowmick.com/> • <https://www.linkedin.com/in/pallabi-bhowmick>

Bloomington, Indiana • +1 (909) 450-7627

---

### EDUCATION

<b>Indiana University, Bloomington</b> Ph.D. Student, Health Informatics	Aug 2019 - Present
<b>Technical University of Munich, Germany</b> MS, Informatics (passed with Merit) Major in Software Systems	Apr 2015 - Mar 2018
<b>Maulana Abul Kalam Azad University of Technology, India</b> (Formerly known as West Bengal University of Technology) B.Tech., Computer Science and Engineering (passed with Distinction)	Aug 2008 - Jun 2012

### RESEARCH EXPERIENCE

<b>Research Assistantship – Indiana University, Bloomington</b> Research Assistant under Prof. Katie A. Siek on the Center for Rural Engagement Grant on developing <b>IoT toolkits</b> for older adult population <ul style="list-style-type: none"><li>Develop IoT devices to assist rural older adults age-in-place and live independently</li><li>Investigate how rural older adults connect with each other and empower them to be more socially connected using technology</li><li>Enable older adults to be a part of Maker Technology and not mere end-users by allowing them to build their own interfaces for toolkits</li><li><b>Publication:</b> Pallabi Bhowmick, Novia Nurain, Kay H. Connelly, Katie A. Siek. 2020. Design and Evaluation of Electronic Check-In Systems for Older Adults. <i>CHI Conference on Human Factors in Computing Systems: Workshop on Designing Interactions for the Ageing Populations – Addressing Global Challenges (CHI '20)</i></li></ul>	Aug 2019 - Present
<b>Research Thesis – Technical University of Munich &amp; University of St. Gallen, Switzerland</b> <ul style="list-style-type: none"><li>Exploration of gaps and synergies between <b>Design Thinking (DT)</b> and <b>Requirements Engineering (RE)</b> for development of a more customer-oriented solution</li><li>A first systematic comparison of DT and RE through extensive systematic literature reviews</li><li>A critical reflection on the implications of merging the strongly diverging human-oriented perspective of DT with the technically driven perspective of RE</li></ul>	Jul 2017 - Mar 2018
<b>Research Project – Indian Statistical Institute, Machine Intelligence Unit</b> <ul style="list-style-type: none"><li>Account of analytical and geometric image features along with quantitative details on camera calibration, region and image segmentation. Successful MATLAB implementation of image enhancement techniques.</li><li><b>Publication:</b> Computer Vision: Techniques and Implementations, ISBN 978-3-659-24175-8, November 2012. Availability: <a href="#">Amazon</a></li></ul>	Jul 2011 - Aug 2012

### WORK EXPERIENCE

<b>Intel Deutschland GmbH [Software Developer (Work Student)]</b> <ul style="list-style-type: none"><li>Design, development, enhancement, and optimization of a Database Information System. Platform: Java, JavaScript, JSP, CSS, HTML, SQL</li></ul>	Aug 2015 - Jul 2017
<b>Wipro Ltd. [Software Engineer, full-time]</b> <ul style="list-style-type: none"><li>Design and development of a live web-application and location tracker used by 1000+ Enterprises across India. Platform: Java, JSP, JavaScript, HTML, CSS, Hibernate, MySQL</li><li>Coordinating trainings and mentoring new employees</li></ul>	Nov 2012 - Mar 2015

## OTHER PROJECTS

<b>Connected Post Box (IoT Solution)</b> – Smart mailbox with audio and email notification feature for postal delivery. Platform – Node-RED (Raspberry Pi)	Sep 2016 - Jan 2017
<b>Wave (IoT Solution)</b> – Converting stream of non-intuitive numerical data from sensors and composing a more intuitive audio tone/music out of it. Platform – Node-RED (Arduino)	May 2016 - Aug 2016
<b>Harmonization of European Patent Statistical Database</b> – Conceptualization of a global event code logic of 90 million patent data and implementation in MySQL legal event database. Platform – HeidiSQL	Jun 2016 - Nov 2016
<b>Innovation in Healthcare</b> – Participating in and analyzing an actual surgery using engineering approach to propose improvements to the surgical team on use of technologies, processes, cost, quality, timing, logistics, etc.	Jan 2016 – Jun 2016
<b>GPU Computing in Computer Vision</b> – Use of NVIDIA CUDA framework for real-time processing of webcam images by parallel programming on GPUs. Platform: C, MATLAB	Mar 2016 - Apr 2016
<b>Data Management System</b> – Development of a software facilitating one-stop management and record-keeping of multi-volume data of jobs in an organization, reducing time, cost, and effort. Platform: Java, MySQL	Jul 2011 - Jun 2012
<b>Robotics</b> – Building a line-follower robot along with object counting using microcontroller and IR sensor. Platform: Embedded C	Oct 2010 - Dec 2010

## CERTIFICATIONS

- OCJP (Oracle Certified Java Programmer), Java SE 6.
- Certifications on **Lean, Agile, SRM** (Software Review and Testing), **SCM** (Software Configuration Management)

## MENTORING / LEADERSHIP / RECOGNITION

- **Academic Service (Mentoring)** – Center of Excellence for Women & Technology (CEWIT) Undergraduates – Lisa Warren (2020-21), Madeline Athanasiou (2020-21), Research Experience for Teachers (RET) – Kris McGlaun (2021-current)
- Appointed the **Luddy Graduate Student Ambassador** for the Academic Year 2020-2021, Indiana University, Bloomington.
- **Elected representative of Informatics (Ph.D. and Grad)** in the GPSG (**Graduate and Professional Student Government**) (2019 – present), Indiana University, Bloomington.
- Appointed the **GPSG International Student Ambassador** for the 2020 calendar year and a Board Member of the **International Affairs Committee** of the **Bloomington Faculty Council**.
- **Appointed by the Dean** Prof. Bungartz, on behalf of TUM Board of Management, to participate in the event of Evaluation of the TUM Department of Informatics by international reviewer board.
- 3 times **invited speaker** at event of Let's talk about Courses & Exams @ TUM as Senior **Mentor** at TU Munich.
- Invited for attending Female Tech Leaders workshop at **Google** and Women in Computing workshop at **Microsoft**.
- **Chief Organizer** at the TUM International Day event, an inter-cultural event that brings together students from all over the world (approx. 30 countries) every year. Also, performed and lead India to win twice at the event.
- One of the **top 6** performers from the recruited batch of 2012 under Telecom Domain in Wipro Ltd., India.
- Received '**Best Presenter Award**' for FY 2012-2013 from Wipro Ltd. for presentation skills.
- Appointed as **People Champ** for FY 2013-2014 for People Connect, East Region, HR Department, Wipro Ltd., India.
- Certified **classical dancer and vocalist** with multiple awards.

## VOLUNTEER WORK

- Student Volunteering experience at **CSCW 2020, 2021** (Day Captain), **CHI 2021** (Day Captain), **UbiComp 2021, ASSETS 2021**.
- Member of **Lions Club of Ranaghat West**, a unit of **Lions Clubs International**, an international non-political service organization headquartered in Oak Brook, Illinois, with over 1.7 million members in 190 countries around the world.
- Actively volunteered in India for various blood donation and eye treatment camps, environmental and community services such as reaching out for disaster relief.
- Developed small web applications for a couple of orphanages for management of organizational data.