

Dibya Prokash Sarkar

[LinkedIn](#) | [GitHub](#) | [Website](#) | [Google Scholar](#)

Location: Courtenay, BC, Canada

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CAREER OBJECTIVE

I am passionate to blend the artistry of user experience design with the precision of software engineering to craft seamless digital solutions that captivate, engage, and exceed user expectations.

TECHNICAL SKILLS

Languages	: JavaScript, PHP, Java, HTML, CSS, C, C++, C#, Kotlin, Python, R, SQL, Processing
Frameworks	: React.js, Angular.js, CodeIgniter, Laravel
Databases	: MySQL, Oracle
Dev. Tools	: Visual Studio Code, Android Studio, Arduino IDE, Processing, Unity
Wireframes	: Balsamiq, InVision, Figma, Adobe XD
Technologies	: Latex, Microsoft Office, WordPress, NVivo

EDUCATION

University of Victoria Master of Science in Computer Science Supervisors: Dr. Sowmya Somanath & Dr. Charles Perin	Victoria, BC, Canada Jan 2021 – August 2024
North South University Bachelor of Science in Computer Science & Engineering Supervisors: Dr. Nova Ahmed & Dr. Tamanna Motahar	Dhaka, Bangladesh Sept 2014 – Dec 2018

TEACHING EXPERIENCE

Instructor North Island College	August 2024 – Present Courtenay, BC, Canada
<ul style="list-style-type: none">Designed and developed comprehensive learning materials, including lecture slides, in-class demonstrations, and practical exercises, tailored to enhance student engagement and accommodate diverse learning styles.Utilized diverse instructional approaches and resources, including IF-AT cards and online video tutorials, to effectively address varying learning needs and enhance student comprehension.Taught essential concepts and skills, covering all required content to build a strong foundation in the subject matter and practical skill application.Maintained regular availability during scheduled office and classroom hours to discuss students' progress and address any factors impacting their learning experience.Developed and administered evaluations to assess student progress, providing timely feedback to keep students informed of their achievements and areas for improvement.Courses taught: DGL 103: HTML & CSS (Fall '24); DGL 123: Introduction to PHP (Fall '24); DGL 213: Applied JavaScript (Fall '24); DGL 203: Advanced CSS (Fall '24); DGL 104: App Development Foundations (Winter '25); DGL 114: Introduction to Mobile App Development (Winter '25); DGL 113: Introduction to JavaScript (Winter '25); DGL 233: Advanced WordPress (Winter '25)	
Graduate Teaching Assistant (GTA) University of Victoria	May 2021 – April 2024 Victoria, BC, Canada
<ul style="list-style-type: none">Taught lab sessions and prepared lab materials and demos for undergraduate and graduate courses.Graded assignments, presentations, and exams, and mentored students.Courses taught: SENG 310: Human Computer Interaction (Summer '21, Fall '21, Summer '22, Fall '22, Fall '23, Spring '24); CSC485E/CSC586B: Designing Creativity Support Tools (Spring '22, Spring '23)	

RESEARCH EXPERIENCE

Graduate Research Assistant (GRA)

University of Victoria

Jan 2021 – April 2024

Victoria, BC, Canada

- **Designed and conducted a remote qualitative user study** (such as, *semi-structured interviews, photo/audio/video elicitation, diary booklet and ethnography*) to identify requirements and pain points.
- **Developed a web prototype** using **HTML, CSS, PHP, JavaScript, SQL, Python, and Google Teachable Machine**.
- **Prepared scientific reports** for academic publication based on the findings.

INDUSTRY EXPERIENCE

Software Developer

Disseminare Consulting

Jun 2019 — Aug 2020

Dhaka, Bangladesh

- Provided technical support to colleagues and key clients, **addressing ad hoc requests and delivering training to new trainees**
- Collaborated closely with the R&D and web development teams to develop software and websites for the clients
- Conducted **user studies** to understand the pain points and needs of the client to improve the overall user engagement in the websites
- Produced **user persona, tasks, journey maps with user requirements, sketches, storyboards, and presented** the results to the clients
- Generated **low- and medium-fidelity prototypes** using wire-framing tools (e.g., Balsamiq and Adobe XD) to demonstrate detailed interactions, and conducted usability testing of the interfaces with the clients
- Worked with **MVC frameworks** to develop robust and scalable back-ends
- Designed and developed dynamic and responsive high-fidelity editable websites templates for personalized content delivery, based on the client and user requirements using **HTML, CSS, JavaScript, and PHP**
- Worked with **REST APIs** to retrieve and display data from databases
- Improved **website performance** and speed through optimization techniques by **55%**
- Troubleshooted and **fixed bugs and issues** in the back-end to ensure **smooth operation** of the applications

Junior Web Developer

Finova Technologies

Apr 2019 — Jul 2019


Dhaka, Bangladesh

- Assisted in implementing support systems and sales report dashboards.
- Conducted **Search Engine Optimization (SEO) research** (such as, *keyword Research, on- and Off-page optimization, market and competition analysis using google analytics and google webmaster*) to increase website traffic.

ACADEMIC PUBLICATIONS

Google Scholar Metrics: Total Citations: 29; h-index: 3


Journal Articles (J)

- J.1 Mohammad Kaosain Akbar, **Dibya Prokash Sarkar**, Emrul Kaiser. 2022. I Am Here: Privacy Aware Support. In **International Journal for Research in Applied Science & Engineering Technology**. 10(ix), pp. 1162-1173. 


Peer-reviewed Conference Papers (C)

- C.3 **Dibya Prokash Sarkar**, Sowmya Somanath, and Charles Perin. 2025. Collaboration Dynamics in Constructive Physicalization of Shared Personal Data. In **Proceedings of the 51st Graphics Interface Conference (GI '25)**. Association for Computing Machinery, New York, NY, USA. *Appearing Soon*.
- C.2 Tamanna Motahar, Md. Fahim Farden, **Dibya Prokash Sarkar**, Md. Atiqul Islam, Maria E. Cabrera, and Maya Cakmak. 2019. SHEBA: A Low-Cost Assistive Robot for Older Adults in the Developing World. In **2019 28th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)**. IEEE Press, 1–8. 
- C.1 **Dibya Prokash Sarkar**, Md. Fahim Farden, Md. Atiqul Islam, Rahat Jahangir Rony, and Tamanna Motahar. 2019. A Low-cost Healthcare Bot for Elderly People. In **2019 Joint 8th International Conference on Informatics, Electronics & Vision (ICIEV) and 2019 3rd International Conference on Imaging, Vision & Pattern Recognition (icIVPR)**. pp. 18-23. 

Posters (P)

- P.1 Tamanna Motahar, Md. Fahim Farden, Md. Atiqul Islam, Rahat Jahangir Rony, and **Dibya Prokash Sarkar**. Mini Nurse-Bot: A Healthcare Assistance for Elderly People. 2018. Mini Nurse-Bot: A Healthcare Assistance for Elderly People. In ***Adjunct Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers (UbiComp '18)***. Association for Computing Machinery, New York, NY, USA, 170–173. 

Workshop Papers (W)

- W.1 **Dibya Prokash Sarkar**. 2018. A Nurse Bot for Elderly People. In ***Adjunct Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers (UbiComp '18)***. Association for Computing Machinery, New York, NY, USA, 1798–1799. 

Thesis (T)

- T.2 **Dibya Prokash Sarkar**. 2024. Understanding Shared Personal Data Constructive Physicalization Process.
- T.1 Mohammad Kaosain Akbar, **Dibya Prokash Sarkar**, Emrul Kaiser, Soufia Neli Roshni, Nova Ahmed. 2018. I Am Here: A Security Service Preserving Privacy.

AWARDS & HONORS

Merit-based Scholarships & Awards

- **University of Victoria Graduate Award** by the Faculty of Graduate Studies (FGS) (Term: Summer 2024, Summer 2023, Spring 2023, Summer 2022, Spring 2022)
- **Graduation Cum Laude** by North South University (2019)

Research-based Grants

- **iDEA Startup Grant** for one year by the Ministry of Bangladesh ICT (2022)
- **SIGCHI Student Travel Grant** to attend UbiComp Conference by SIGCHI (2018)

ACADEMIC & EXTRA-CURRICULAR SERVICES

- **Reviewer** – CHI Late Breaking Works (2022), HRI Late Breaking Report (2019)
- **Student Volunteer** – GI Student Volunteer (2023), UbiComp Student Volunteer (2018)
- **Co-founder & Vice Chair Outreach** – UVic ACM Student Chapter (2022 – 2023)

CERTIFICATIONS

- **Practical SEO** – SEO Basics, Keyword/Market Research, On and Off-page Optimization, Competition Analysis & Tools (Google Webmaster Tool & Google Analytics)

REFERENCES

Available upon request.

Signature: Dibya Prokash Sarkar

Last Updated: April 8, 2025