# Tathagata Roy

## **EDUCATION**

• Indian Institute of Information Technology, Kalyani	2020 - 2024
Bachelor of Technology in Computer Science and Engineering	GPA: 9.28
• Garden High School, Kolkata	2008 - 2018
Matriculation	94.6%
• Garden High School, Kolkata	2018 - 2020
10 + 2	91.75%

### EXPERIENCE

• DigitalAlly | Remote Internship September 2021 - December 2021 - Worked with libraries such as axe, equal-access and pally to create applications for testing website accessibility.

• INRIA | Remote Internship under Dr Julia Lawall
Extended SmPL in Coccinelle with C++ constructs, mainly new and enum.

May 2022 - July 2022

• INRIA | On-site Internship in Paris under Dr Julia Lawall Dec 2022 | June 2023 - July 2023 Worked on CoccinelleForRust which extends SmPL for the Rust programming language.

• AEL Data Services | Remote SDE August 2023 - November 2023 Built an MVP designed to comprehensively analyze entire websites for potential accessibility violations.

INRIA | On-site Internship in Paris under Dr Julia Lawall

Implementing the Computational Tree Logic Engine and Scripting for CoccinelleForRust. This internship is still in progress.

### **PROJECTS**

Coccinelle | Ocaml, C++

2022

It is a program matching and transformation engine which provides the language SmPL (Semantic Patch Language) for specifying desired matches and transformations in C code. My work involved extending SmPL for the 'new' and 'enum' C++ constructs.

**CoccinelleForRust** | Rust

December 2022 – Present

A project which aims at extending functionalities of Coccinelle to the Rust programming language. (Project Maintainer) | Repository | LPC 2023 | Kangrejos 2023

• Tublets | Javascript September 2021 - December 2021 - Tublets aid developers, testers, and designers in viewing accessibility information on web pages.

• Accessibility Colour Contrastor | Javascript September 2021 - December 2021 - Accessibility and colour verifier to aid users and developers to make more inclusive websites.

#### ACCOMPLISHMENTS

- 1st Place in Smart India Hackathon(India's Largest Hackathon) 2022 Software Edition.
- Co-organized Winter of Code, Hacktoberfest, Pratiti 2022 and other events in IIIT Kalyani Gymkhana.
- Selected for Indian National Olympiad of Informatics (INOI) 2020 by qualifying ZCO 2020 and ZIO 2020
- Secured Second position in interschool Competitive Coding competition Logique 2020, held at DPS Ruby Park
   Semi-finalist in National Karate Championship (Kyukoshin, Shinkyokushinkai) Karate Point India
   under the guidance of Shihan Shivaji Ganguly

#### References

- Bhaskar Biswas Assistant Professor, Indian Institute of Information Technology(IIIT) Kalyani
- Julia Lawall Research Director at National Institute for Research in Digital Science and Technology(INRIA), France
- Eleni Boursinou OER Project Specialist, UNESCO