

Sagnik Chatterjee

C-004, Old Boy's Hostel, Indraprastha Institute of Information Technology Delhi, 110020

🌐 chatsagnik.com 🌐 /in/chatsagnik ✉️ sagnikc@iiitd.ac.in 🌐 chatsagnik 📄 bit.ly/stacksagnik

Current Position and Research Interests

I am a PhD candidate at **IIIT Delhi**, advised by **Dr. Debajyoti Bera**. Currently, I am investigating quantum optimization techniques.

Research Work

	Applying the Quantum Alternating Operator Ansatz to the Graph Matching Problem
JAN'21	Poster accepted in QIP'21.
DEC'20	Extended abstract accepted in AQIS'20.
NOV'20	Pre-print(v1) at https://arxiv.org/abs/2011.11918 .

Education

	Indraprastha Institute of Information Technology, Delhi
JUL '19 to present	Doctoral Student (Ph.D.) in <i>Computer Science</i> Dissertation area: <i>Quantum computing</i>
	Maulana Abul Kalam Azad University of Technology, Kolkata
AUG '17	Bachelor of Technology in <i>Computer Science and Engineering</i> (8.10/10)
	Don Bosco School, Bandel
APR '13	Indian School Certificate Examinations (91.75 %)
APR '11	Indian Certificate of Secondary Education (95.4 %)

Teaching Experience

JAN '20 to MAY '20	Teaching Assistant for Theory of Computation course offered in the Winter 2021 semester. Course Website: http://bit.ly/toc2021
AUG '20 to DEC '20	Teaching Assistant for Modern Algorithm Design course offered in the Monsoon 2020 semester. Course Website: http://bit.ly/mad-2020
JAN '20 to MAY '20	Teaching Assistant for Theory of Computation course offered in the Winter 2020 semester. Course Website: http://bit.ly/toc2020

Selected Co-Curricular Activities

FEB '21	Attending the 11th BIU Winter School on Cryptography.
DEC '20	Gave a talk on Quantum Machine Learning at a Faculty Development program hosted by Jawaharlal Nehru Technological University, Anantapur. Slides at https://bit.ly/qmlslides .
FEB '20	Accepted to the workshop on Sensitivity, Query Complexity, Communication Complexity and Fourier Analysis of Boolean Function organized by the Indian Statistical Institute , Calcutta. https://bit.ly/isiworkshop20 .
JAN '20	Received 2 nd place in the IBM Q Awards , Teach Me Quantum category. https://bit.ly/ibmqawards20
DEC '19	Accepted to the 4th Winter School in Computer Science and Engineering (on The Mathematics of Quantum Computation) organized by the Israel Institute for Advanced Studies , at the Hebrew University of Jerusalem. https://ias.huji.ac.il/SchoolCSE4 .

Selected Co-Curricular Activities (continued)

DEC '19 | Attended workshop on **Complexity in Algorithmic Game Theory** at IIT Bombay.
<https://sites.google.com/view/cagt-2019/>.

Industry Experience

NOV '18 to MAR '19 | **Oracle Financial Services Software Limited**
Staff Consultant: Developed data models. Programmed generation of scheduled reports during **EOD** operations in the bank. Bank successfully went live in December 2018.

SEP '17 to OCT '18 | **Associate Consultant:** Customized the business logic of our core product FCUBS.
Technology Stack | FLEXCUBE, BI-Publisher, JAVA, JSP, Weblogic, JS, SOAP, Spring, Hibernate, Oracle 12c, SQL.

FEB'17 TO MAY'17 | **Infosys Limited**
Systems Engineering Intern (Full Stack Developer): Agile methodology.
Technology Stack | JAVA, Weblogic, Angular, REST, Spring, Hibernate ORM, Oracle 12c, SQL, PL/SQL.

SUMMER 2016 | **ALCircle Pte Ltd**
Data-Analyst Intern (Python Application Developer): Created an application to source content for the editorial team. Crawler+Database Insertion+Automated Updates.
Technology Stack | Python, MySQL, REST.

Selected Extra-Curricular Activities

FEB '20 | Helped organize the Indo-German Spring School on Algorithms for Big Data 2020, at IIIT-Delhi.
<https://sites.google.com/view/abd2020/home>.

FEB '20 | Organized the first Quantum Computing Meetup in New Delhi, at IIIT-Delhi in association with the IBM advocates of India. <https://bit.ly/indiaqc>.

DEC '16 | Represented MAKAUT-Inhouse at ACM-ICPC Amritapuri Regionals 2016.

Key Skills

PROGRAMMING LANGUAGES	Java, C++, C, Python, JavaScript, SQL, UNIX shell, MATLAB
PROPRIETARY PRODUCTS	QISKIT, Pennylane, FLEXCUBE, BI-Publisher, Weblogic, Tomcat, Oracle 12c
MARKUP LANGUAGES	HTML5, CSS, XML, LaTeX, Markdown

References

Dr. Debajyoti Bera | Department of Computer Science, IIIT Delhi
Email: dbera@iiitd.ac.in

Dr. Syamantak Das | Department of Computer Science, IIIT Delhi
Email: syamantak@iiitd.ac.in