

# Arnab Mondal

arnab-m.github.io | LinkedIn/arnab-mondal-47193b30/  
mondal.arnab27@gmail.com | +91.7358367285 | amondal23@iitkgp.ac.in

## EDUCATION

### IIT KHARAGPUR

MS IN COMPUTER SCI. (CPS-IoT)  
Jan 2018 - Present | Kharagpur, Ind  
CGPA: 7.11 / 10

### IIST SHIBPUR

BE IN ELECTRICAL ENGINEERING  
Jun 2011 - May 2015 | Howrah, Ind  
CGPA: 8.02 / 10

### MIDNAPORE COLLEGIATE

HS. May 2010 | Midnapore, Ind  
Marks: 87.6%

### KESHIARY HIGH SCHOOL

Madhyamik. Apr 2008 | Keshiary, Ind  
Marks: 93.5%

## SOFT SKILLS

Team Player • Leadership  
Critical thinking • Autonomy  
Chain of communication (virtual)  
Flexibility & Versatility  
Change & Performance management  
Systemization • Curiosity  
Business & Regulatory acumen

## HARD SKILLS

### PROGRAMMING

Over 5000 lines:  
Arduino • Modelica • C • Python  
HTML(5) • CSS(3) • SQL •  $\text{\LaTeX}$   
Over 1000 lines:  
Bootstrap Framework • JSON  
Javascript • Angular JS • JQuery  
Matlab • PHP  
Familiar:  
C++ • Java • XML • LESS  
Ajax • SCALA

### TOOLS/Frameworks

MS Office • Magento(EE1.14.x) • Qt  
MATLAB-Simulink • Arduino IDE  
OpenModelica 1.1x.x • Subversion  
XAMPP/LAMP • Sublime Text • Git  
PSCAD • BigCommerce • Maxima  
Oracle Maxymiser • Swing (Java)  
Salesforce • LabVIEW • SCADA

### HARDWARES

NRF24L01+ • RIGOL DS1102E • PMU  
Arduino UNO & MEGA • LoRa SX 12xx  
OPAL-RT OP4510

## EXPERIENCE

### SRIC, IIT KGP | HARDWARE SOFTWARE Co-DESIGN AND CAD DESIGN

As Research Consultant | Jun 2017 - Mar 2021

- Developed a **programmable testbed** with open architecture for **scheduling** and **analysis** of **Multi-hop Control Networks** in CPS.
- Created a **software tool** using AngularJS, Python, and Openmodelica for **automated generation** of smart **micro power grid design**. [*Github Repo*]

### LISTER TECHNOLOGIES P LTD | END-TO-END WEB DEVELOPMENT

As Software Engineer | Sep 2015 - May 2017

- Responsible for **Extended Promotion** features, **Third-party integrations** (e.g. Google Map, Oracle Responsys etc.), **Shopping Cart** development, **Extended Checkout** flow, **Extended Order** management, **Order Export** flow, **MyAccount** development and implementing **Flexible Design** for eight countries websites both Desktop and Mobile that offer to learn of more than 30 languages.
- Developed fast and powerful **web interfaces** using **UIKit**, a lightweight and modular front-end framework.
- Worked on BigCommerce, **Webhooks** and **Management APIs**.
- Worked with **Salesforce**, a customer relationship management solution, and **Contextip's Recommendation engine** that uses data that lives in Salesforce.

## PROJECT

### OPTIMAL PLACEMENT OF PMUS IN POWER SYSTEM

Aug 2014 - Jun 2015 | EE, IISTE | Supervisor: Prof. K. Das (Bhattacharya)  
Justified the proper placement of optimal no. of **Phasor Measurement Units(PMUs)** in a balanced section of the **DVC GRID 220KV(Existing)** to make the Smart Power System Grid topologically observable.

## VOCATIONAL TRAINING

### HYDRO-ELECTRIC 900 MW POWER GENERATION

Dec 2013 - Jan 2014 | PPSP, WBSEDCL | Trainee Operation Engineer  
Closely monitored Pump Storage Hydro 900 MW power generation, underground Power House, **SCADA** (Supervisory Control And Data Acquisition), **400kV GIS**, and **132/33/11kV Substation**.

## AWARDS AND ACHIEVEMENTS

2011	Top 0.5%/1,30,000	Joint Entrance Exam (WBJEE)
2010	top 52/6,00,000	Higher Secondary Exam - 12th (WBCHSE)
2009	Statewise Top 1% and 10%	National Standard Exam (Physics and Astronomy)
2008	Rank 5 in Sub-division	Madhyamik - 10th (WBBSE)

## PUBLICATIONS

- S. Ghosh, A. Mondal, P. H. Kindt, P. Sharma, Y. Agarwal, S. Dey, A. K. Deb, and S. Chakraborty. A programmable open architecture testbed for cps education. *IEEE Design Test*, 37(6):31–38, 2020.
- S. Ghosh, A. Mondal, D. Roy, P. H. Kindt, S. Dey, and S. Chakraborty. Proactive feedback for networked cps. In *Proceedings of the 36th Annual ACM Symposium on Applied Computing*, SAC '21, page 164–173, New York, NY, USA, 2021. Association for Computing Machinery.