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**Atanu Shuvam Roy**  
*B.E. Computer Science & Technology*  
*Jiangxi University of Science &*  
*Technology*

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Personal Email:  
atanuroy911@gmail.com

## Summary

Experienced with web application and web site development for over 3 years in university laboratory. Young researcher seeks to learn new technology. Proven track record of working flawlessly in a team and completing projects with maximum efficiency

## Current Status

### Current Research Project:

- UAV Monitoring System

### Past Position:

- Student Research Assistant, Robotics and Automation Lab (RARL), School of Information Engineering, Jiangxi University of Science and Technology, Jiangxi, China.

### ResearchGate Page:

- <https://www.researchgate.net/profile/Atanu-Roy-8>

### Website:

- <https://atanuroy911.github.io/>

## Basic Information

Date of birth:	07 Jan 1999	Contact Number:	+880 1937545261
Place of birth:	Dhaka, Bangladesh	LinkedIn Page:	<a href="https://www.linkedin.com/in/atanuroy911">https://www.linkedin.com/in/atanuroy911</a>

## Education

Start	Mar 2018	B.E. Jiangxi University of Science and Technology (JXUST) 【江西理工大学】
End	Jan 2022	Department of Information Engineering <i>B.Sc. in Computer Science &amp; Technology</i> Supervisor: <b>Dr. Ata Jahangir Moshayedi</b>
<b>Thesis:</b>		Self-Lecture Attendance System with QR Code Technology & WeChat Mini Program
<i>Specialized Courses:</i>		Computer Networking (A); Web Development (A); Software Engineering (A); Embedded System Design (A); Android Application Development (A);
<b>Grade Point Average:</b>	<u>4.1/5.00</u>	<b>Weighted Average:</b> <u>91.01</u>

## Completed Course Projects

2020-2021	<b>Bitcoin-Core Web Application</b>	
	Instructed by	School of Information Engineering, Jiangxi University of Science and Technology, China.
	Job	Full System Development
	Link to Project	<a href="https://github.com/atanuroy911/BTC-CORE-WEBAPP">https://github.com/atanuroy911/BTC-CORE-WEBAPP</a>

### Total 155.5 credit

July 2016 - July 2017	<b>High School Diploma (A Level Equivalent)</b>	Notre Dame College, Dhaka, Bangladesh
	Higher School Certificate (HSC) in Science (G.P.A. 5.00)	
Jan 2013 - Dec 2015	<b>Secondary School Diploma (O Level Equivalent)</b>	St. Joseph Higher Secondary School, Dhaka, Bangladesh
	Secondary School Certificate (SSC) in Science (G.P.A. 5.00)	

## Work Experience

2018-2022	<b>Student Research Assistant [Part-Time]</b>	
	Sponsored by	Robotics and Automation Research Lab, School of Information Engineering, Jiangxi University of Science and Technology, China. <a href="https://rarlroboticresearchlab.github.io/">https://rarlroboticresearchlab.github.io/</a>

	Responsibilities	<ul style="list-style-type: none"> <li>- Conduct literature reviews</li> <li>- Collect and analyse data</li> <li>- Conduct Experiments</li> <li>- Write and contribute to publications</li> <li>- Guide the work of other students</li> <li>- Prepare other articles, reports and presentations</li> <li>- Proofread research documents</li> </ul>
2021	<b>Academic intern - Qianfeng Interconnection Technology Co.   JXUST</b>	
	Sponsored by	School of Information Engineering, Jiangxi University of Science and Technology, China.

Jobs Completed	<ul style="list-style-type: none"> <li>- Designing and developing a Web Application using SpringBoot about blockchain</li> <li>- Working with Bitcoin-Core JSON-RPC API, Bitcoin Wallet Transaction, NONCE Calculation of Blockchain etc.</li> <li>- Visiting TELLHOW - Learn about VR Technology</li> <li>- Visiting HIKVISION - Learn about Digital Image Processing &amp; AI Cloud</li> </ul>
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## Fields of interest based on publication and projects

- Automation and Robotics
- Internet of Things (IoT)
- Embedded System
- Software Prototyping
- Android Development
- Computer Networking
- Animation
- Unity Game Development
- Artificial Intelligence

## Honours / awards

2022	<b>2022 Outstanding International Graduate Award - Jiangxi University of Science &amp; Technology</b>
2020-2021	<b>2021年(第14届)中国大学生计算机设计大赛(江西省赛区)中荣获 - 14th China University Computer Design Competition (Jiangxi Province)</b> Web Page: <a href="https://2021.jsjds.com.cn/">https://2021.jsjds.com.cn/</a> Rank: <b>Second Prize (Provincial Level)</b> Rank: <b>Third Prize (National Level)</b>
2020-2021	(债券图表数据OCR检测与文本识别) Rank: <b>Participation</b>
2020-2021	<b>江西省政府奖学金 "Jiangxi Provincial Government Scholarship for foreign students"</b>
2018-2019	<b>江西省政府奖学金 "Jiangxi Provincial Government Scholarship for foreign students"</b>
2019_2020	<b>年全国大学生“互联网+”创新大赛 暨第七届“发现杯”全国大学生互联网软件设计大奖 national University Students "Internet" Innovation Competition and the 7th "Discovery Cup" National College Students Internet Software Design Competition in 2019, web page: <a href="http://www.dajiangsai.org/">http://www.dajiangsai.org/</a>, Award information website: <a href="http://www.dajiangsai.org/news/0512-1440.html">http://www.dajiangsai.org/news/0512-1440.html</a></b> , rank: <b>Second prize in Central China.</b>

## Certifications

- Google IT Support Specialization (Issued: May 2019) – Credential ID: XWWFL3BT84WV

## Selected Completed Research Projects

2019-2020	<b>Self-Lecture Attendance System</b>
	<ul style="list-style-type: none"> <li>• Acted as Team Leader and the lead developer of the project Prototyped the main project with PhP for the server module and MIT App Inventor for the Client Module (Android)</li> <li>• Contributed in converting the project to Java using SpringBoot Framework for Server module and WeChat Mini Program for the client module that could communicate with the server for students to submit attendance</li> <li>• Deployed the project on cloud and maintained it</li> <li>• Created the presentation and video demonstration of the project</li> </ul>
GitHub	<a href="https://github.com/atanuroy911/SLAS_WEB">https://github.com/atanuroy911/SLAS_WEB</a>
YouTube	<a href="https://youtu.be/Y_qxxhHytMg">https://youtu.be/Y_qxxhHytMg</a>

2019-2020	<b>Canteen Management System 【食堂经理】</b>
	<ul style="list-style-type: none"> <li>Acted as team member and contributed in the development of the Web Application's Frontend using SpringBoot and HTML/CSS</li> <li>Contributed in the design of the WeChat Mini Program that would take orders and reviews of the customers and communicate with the Web Application so that the Manager can review them later Developed the web applications' report generation system which takes all orders and customer reviews into account to show if the particular food item is likeable or not</li> </ul>
GitHub	<a href="https://github.com/atanuroy911/SJ_RARL">https://github.com/atanuroy911/SJ_RARL</a>
YouTube	<a href="https://youtu.be/7dQric8m3BE">https://youtu.be/7dQric8m3BE</a>
2018-2019	<b>Raspberry Pi SCADA for Agricultural Plant Monitoring</b>
	<ul style="list-style-type: none"> <li>Conducted background studies on related papers on HMI/SCADA and Industrial Plant Monitoring with Raspberry Pi</li> <li>Designed a zonal model that mimicked 4 industrial zones with microcontrollers and sensors which were blind to one another but visible to another zone called main zone that is able to control and oversee all</li> <li>Implemented the designed model using Arduino, corresponding sensors and to tie them all Raspberry Pi computers</li> <li>Developed a python program that takes in data from sensors connected to Arduino over serial and uploads them to a database on the cloud</li> <li>Developed a Web Application that lets individual zones to control and monitor themselves (locally) and main zone to control and monitor all the zones (locally and remotely) over the internet</li> </ul>
YouTube	<a href="https://youtu.be/AriVPqGqBu8">https://youtu.be/AriVPqGqBu8</a>
2018-2019	<b>Development of FOOD Delivery Robot</b>
	<ul style="list-style-type: none"> <li>Developed the network system which allowed the operator of the Robot to communicate with the robot over WiFi</li> <li>Developed a Web Application (using PhP) that allows operators of the Robot to see what the robot sees and also maintain the orders of the Robot via web browser</li> </ul>
2020-2021	<b>Chinese OCR detection and text recognition of bond chart data with Python 【债券图表数据OCR检测与文本识别】</b>
	<ul style="list-style-type: none"> <li>Helped in designing the GUI of the system using Python Tkinter</li> <li>Created the presentation and video of demonstration of the project</li> </ul>
YouTube	<a href="https://www.youtube.com/watch?v=-FW7XuaHVX0">https://www.youtube.com/watch?v=-FW7XuaHVX0</a>
2020-2021	<b>Pandemic-driven Exam Assistant [PEA] 【基于疫情的在线考试助手PEA】</b>
	<ul style="list-style-type: none"> <li>Acted as the Team Leader and the lead developer of the project</li> <li>Designed and developed server module using PhP and client application with Kotlin using OpenCV Deployed the project on Raspberry Pi cloud system for global access</li> <li>Conducted experiments on the system with students across 5 countries (China, Bangladesh, Iran, South Africa, Pakistan)</li> </ul>
GitHub	<a href="https://github.com/atanuroy911/PEA_RARL">https://github.com/atanuroy911/PEA_RARL</a>
YouTube	<a href="https://youtu.be/przc4RQfJE4">https://youtu.be/przc4RQfJE4</a>

## Publications and Patent Summary

<b>Patent and copy write</b>	<b>1</b>
<b>International Conferences</b>	
• IEEE	<b>1</b>
• International Journals (Language: English)	<b>1</b>
<b>Total Paper Publications:</b>	<b>2</b>

## Publication and Patent Details

### A. Patent and Copywrite:

#### *Copy-Write*

- Self-Lecture Attendance System 自学考勤系统,[简称: SLAS],登记号: 2020SR0058411

### B. Papers Published:

#### *Conference Publications (IEEE Level)*

- Moshayedi Ata Jahangir, **Atanu Shuvam Roy**, Liefa Liao, Li Shuai "Raspberry Pi SCADA Zonal based System for Agricultural Plant Monitoring", ICISCE 2019 2019, DEC2019

## Journal Publications

1. Moshayedi Ata Jahangir, **Roy Atanu Shuvam**, Liefa Liao, "PID Tuning Method on AGV (automated guided vehicle) Industrial Robot", Journal of Simulation and Analysis of Novel Technologies in Mechanical Engineering (JSME) Volume 12, Issue 4 - Serial Number 39, Autumn 2019
2. A. J. Moshayedi, **A. S. Roy**, A. Kolahdooz, and Y. Shuxin, "Deep Learning Application Pros And Cons Over Algorithm", EAI Endorsed Trans AI Robotics, vol. 1, pp. 1-13, Feb. 2022.
3. A. J. Moshayedi, **A. Shuvam Roy**, S. K. Sambo, Y. Zhong, and L. Liao, "Review On: The Service Robot Mathematical Model", EAI Endorsed Trans AI Robotics, vol. 1, pp. 1-19, Feb. 2022.
4. Moshayedi Ata Jahangir, **Roy Atanu Shuvam**, Lan Hong, Liefa Liao "QR and Raspberry Pi based Self-Lecture Attendance Systems (SLAS): Design and Performance Evaluation", Bulletin of Electrical Engineering and Informatics [Under Review]
5. Moshayedi Ata Jahangir, **Roy Atanu Shuvam**, Lan Hong, Kolahdoz Amin "PEA: A novel approach to solving Online Examination Challenge during COVID-19" [Under Review]

## Digital Skills

<b>Programming</b>	C/C++ C# Python Java Kotlin MATLAB Assembly Flutter Dart
<b>Design Development</b>	HTML CSS PHP JS Laravel Vue SQL (MySQL) Worpress Android Unity Arduino Flask Linux WeChat Mini Program
<b>Version Control</b>	Git
<b>Familiar with</b>	Springboot Framework Microsoft Office Deep Learning I2C, SPI, UART etc. OpenCV

## Language Skills

<b>Native</b>	Bengali			
<b>Other</b>	English	<b>IELTS</b>	Reading: 7.5 Speaking: 7.5	Listening: 7.5 Writing: 6.0 Overall: 7.0
	Hindi		Beginner	
	Chinese		Beginner	

## References (Will be available upon request):

<b>Dr Ata Jahangir Moshayedi</b>	<b>(B.E. research Guide)</b>	<b>ajm@jxust.edu.cn   +86 13207074161</b>
<i>Associate Professor, School of Information Engineering, JXUST, Ganzhou, China</i>		
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