Rai Muhammad Ibrahim Badar

Phone number: +44 7497509380/+92 3467210353
Email address: ibrahimbadarroy@gmail.com
Portfolio Website: https://ibrahim-roy.github.io/Portfolio-Website/index.html
GitHub: https://github.com/Ibrahim-Roy/Portfolio-Showcase.git

👤 PROFILE

Diligent and solution-oriented final year Computer Science student at Queen Mary University of London with a rich history of inquisitive and innovative experiences. Keen knowledge in python and java acquired by programming trouble shooters, RPG's and many more. Adept at web development with HTML, CSS, PHP, JavaScript, Python and Django utilization, having developed a portfolio website, a blog engine and multiple other web applications. Proficient at testing and handling errors in an efficient manner. Mature communicator, listener, and team worker, on account of various mentoring and tutoring jobs. Achieved a first throughout successive years at university, predicted to be awarded a first-class honours degree overall. Highly motivated to secure a graduate scheme or job for my career development.

💼 EXPERIENCES

01/2021 – 05/2022   LONDON, UNITED KINGDOM
EECS Demonstrator/Teaching Assistant
Queen Mary University of London
Assisted in the teaching of Web Development, Object Oriented Programming and Algorithms & Data Structures; modules from the previous year at university that I had performed extremely well in. Managed the labs, taking all student queries and participated in script marking.

09/2020 – 05/2021   LONDON, UNITED KINGDOM
EECS Buddy Scheme Mentor
Queen Mary University of London
Provided guidance to first year students in the School of Electronic Engineering and Computer Science.

09/2018 – 06/2019   LONDON, UNITED KINGDOM
Junior Leadership Team
Drapers Academy
Team comprised of Sixth form students, worked collaboratively to represent, and support the pupils at the Academy.

08/2018   LONDON, UNITED KINGDOM
Blockchain Workshop
IBM
Introduced to blockchain in a demo. Participated in an interactive activity that emulated problem solving in software development, analysing customers' requirements, and deducing how they will be achieved. Improving my attention to details, research, critical thinking, analysis, troubleshooting, and decision making. Drove IBM's Formula One race car emulator.

08/2018   LONDON, UNITED KINGDOM
AI Workshop
Google DeepMind
Interactive workshop looking into the progress of Artificial Intelligence, its future capabilities, and applications. Introduced to Alpha Go and its achievements with Go. Interactive activities helped improved problem-solving and time management.

07/2018 – 08/2018   LONDON, UNITED KINGDOM
Robotics Internship
In2Science at UCL
Built and programmed insect mimicking robots using the micro: bit. They are more reliable to navigate remote areas due to their ability to adapt according to terrain and to any damages sustained. Analysed drones and their movement relative to each motor's behaviour. Trialled UCL's HoloLens. This made me more enthusiastic, provided me with a growth mindset towards computer sciences and allowed me to be more open to experiments.

09/2017 – 06/2018   LONDON, UNITED KINGDOM
Tutor/Mentor
Drapers Academy/ Drapers Priory School
Tutored year 6 pupils, to enhance their maths skills, helping them adapt to upcoming GCSE maths. Tutored and mentored year 11 GCSE students enhancing my planning, organisation, mentoring, communication, and team working skills.

10/2015 – 05/2019   LONDON, UNITED KINGDOM

House Council

Drapers Academy

Elected to represent peers in the school's house council, voicing their concerns and needs. Helping solve any problems they encountered and tried to improve overall student life. Helped me become an active listener, more confident, and allowed me to practice public speaking. Also shaped my empathetic and negotiation skills.

09/2016 – 06/2017   LONDON, UNITED KINGDOM

School Prefect

Drapers Academy

Chosen by school staff to help arrange and manage events. Represented students and tried to improve their experience by attending to their concerns. Used the opportunity to improve critical thinking, patience, cooperation, and conflict resolution skills.

01/2016 – 04/2017   LONDON, UNITED KINGDOM

Library Assistant

Drapers Academy

Helped manage the school library, maintaining and expanding the inventory. Improving my organisation and time management skills.

06/2012 – 07/2012   FAISALABAD, PAKISTAN

ECO Intern

WWF

Led a team of interns researching inadequate landfill sites. Collaborated with most affected, poverty-stricken locals, and voiced their concerns and their calls for help. Influenced the local authorities to clear the landfills. Rewarded a year's membership with WWF. Honed leadership, communication, management, and presentation skills helped improve a small groups quality of life.

🎓 EDUCATION

09/2019 – PRESENT   LONDON, UNITED KINGDOM

Computer Science

Queen Mary University of London

BSc FT 3 year

Computer Systems & Networks, Logic & Discrete Structures, Procedural Programming, Research & Professional Practices, Automata & Formal Languages, Fundamentals of Web Technology, Information System Analysis, Object Oriented Programming, Algorithms & Data Structures, Database Systems, Probability & Matrices, Software Engineering, Operating Systems, Graphical User Interfaces, Internet Protocols & Applications, Web Programming, Embedded Systems, Multi-Platform Game Development, Digital Media & Social

Networks, Neural Networks & Deep Learning, Security Engineering

09/2017 – 06/2019   LONDON, UNITED KINGDOM

A level

Drapers Academy Sixth Form

Physics, Maths, Biology, Chemistry

09/2014 – 06/2017   LONDON, UNITED KINGDOM

GCSE

Drapers Academy

Maths, Statistics, English Language, English Literature, Computer Science, Graphics, Resistant Materials, Urdu, Physics, Chemistry, Biology

🧠 SKILLS

– SOFTWARE DEVELOPMENT

Java, Python, C++, C#, Unity, Procedural Programming, Object Oriented Programming, Testing and Debugging, Multithreading, TensorFlow, Visual Paradigm

– WEB DEVELOPMENT

HTML, CSS, PHP, JavaScript, SQL, PReact, Vue.js, Django, OpenShift, Git

– MULTILINGUAL

English, Urdu, Hindi, Punjabi

👨‍💻 PROJECTS

Hand Sign Recognition Web Application

Python, TensorFlow, TensorFlow.js, HTML, JavaScript, Bootstrap

Used transfer learning with TensorFlow to train a neural network to detect American sign language hand signs from a live video stream. Implemented multiple data augmentation and image processing techniques to expand the collected dataset. Embedded the trained model into a web application with TensorFlow.js to make it more accessible.

Analyses of the Spread of the Pandemic over the Airline Network

Gephi, Python, GeoPandas, NetworkX, EoN

A network analyses over the airline network, created from openflights.org data, to study the spread of the pandemic from Wuhan. Ran the susceptible, infected and recovered/SIR model to generate a map displaying the spread across the world. Lead a team of four.

Hobbies Web App

Python, Django, JavaScript, Vue.js, OpenShift, HTML, Bootstrap, AJAX, Conda, MySQL

A social web application which allows users with similar hobbies to find and interact with each other. Largely developed with Django using a MySQL database in a Conda virtual environment. Uses Vue.js for a reactive user interface and AJAX for communication between the client and the server. Evaluated with multiple unit and selenium tests. Developed by a team of four.

Isometric Open World RPG

Unity, C#

A survival game featuring; a diverse open world map, melee and ranged combat styles, resource mining, resource gathering, crafting systems and much more. Uses an isometric camera to make a 2D game appear 3D. Developed with Unity's game engine, using object-oriented C# scripts. Uses Pixel art sprites. Lead a team of three throughout development.

Online Community Management Web Application

Python, Django, JavaScript, Vue.js, OpenShift, HTML, Bootstrap, AJAX, Conda, MySQL

A web application to create and manage online communities and their users. Developed with python's Django in a Conda virtual environment. Uses a MySQL database, Vue.js for a reactive user interface and AJAX for communication between the client and the server.

Neural Network for the MNIST Fashion Dataset

Python, PyTorch

Created a neural network from scratch using Python and PyTorch for the MNIST Fashion Dataset. Achieved an accuracy of above 87%.

Weather Forecast Mobile App

HTML, CSS, JavaScript, PReact

Used the OpenWeather API to develop a weather forecast application for phones. PReact was used for an interactive user interface and to introduce myself to the workings of React.

FDM Trainer Skills and Availability App Prototype

HTML, CSS, JavaScript

A web application to help the FDM course scheduling team to create courses with available trainers according to there skills and alert the trainers on their timetables when they get scheduled to run a particular course. Additionally, the application allows creating trainee accounts, adding them to the course and creating timetables for each trainee. Collaborated with a team of four.

Portfolio Website with a Blog Engine

HTML, CSS, JavaScript, PHP, SQL, Bootstrap

Object Oriented Video Game

Java

Text Based Game with Procedural Programming

Java

🏆 ACHIEVEMENTS

10/2020   LONDON, UNITED KINGDOM
Annual Fund Scholarship

Queen Mary University of London

Awarded to a student whose work is considered by their faculty, the School of Electronic Engineering and Computer Science, to be of outstanding academic merit.

05/2017, 04/2019   LONDON, UNITED KINGDOM
DofE Bronze and Silver award

DofE Drapers Academy

6 months of volunteering, physical activities and skill improvement followed by planning and executing five expeditions lasting 2 to 3 nights each. Enhancing management, teamwork, communication, and navigation skills.

11/2019   LONDON, UNITED KINGDOM
The Frankland Cup

Drapers Academy

Awarded to the top science student in honour of Dr Bill Frankland.

11/2017   LONDON, UNITED KINGDOM
Drapers Company Medal

Drapers Academy

Awarded due to outstanding academic achievement in GCSE's, rewarded by the Drapers Company.

08/2017   LONDON, UNITED KINGDOM

Grade 9 in GCSE Maths

Drapers Academy

Top 4.7% of all pupils in England.

01/2011 – 02/2011   FAISALABAD, PAKISTAN

Second position Roots Science Expo

Roots Ivy

Led a team and developed a Smart Home model. Used light, heat, water, motion, and sound sensors to allow the house to automate according to any stimuli.

01/2011 – 02/2011   FAISALABAD, PAKISTAN

Third position Roots Science Expo

Roots Ivy

Led a team to manufacture a full-size rowing boat out of recycled water bottles. Displayed economic and ecological solutions for poor fish farmers and for remote lakes.

▶ HOBBIES

HORSE RIDING   SWIMMING   TENT PEGGING   ARCHERY   GUITAR   PROGRAMMING   GAME DEVELOPMENT

References available on request!
Please visit:
The portfolio website to view certificates!
The GitHub repository to view the source code and the documentation for all the projects!
(The links to the portfolio website and the GitHub repository are available at the top of the first page)