

Mohammad Ryyan Rashid

Bachelor's Degree in Computer Science (Hon.)

University Sains Malaysia

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in LinkedIn 🐙 Github

Profile

I am a Computer Science (Honors) undergrad student at the University of Sains Malaysia, majoring in Intelligent Computing and minoring in Mathematics (2020-2024). I recently completed a transformative internship at Harvard Medical School, contributing to cutting-edge projects at the intersection of AI and medical research.

Education

Universiti Sains Malaysia,
Bachelor's of Computer Science (Hon.) CGPA 3.52
Oct 2020 – Jul 2024 | Georgetown, Malaysia
Major - Intelligent Computing
Minor - Mathematics

Professional Experience

Harvard Medical School, Research Intern
Apr 2023 – Oct 2023 | Boston, MA, USA
Participated in a transformative Harvard Medical School internship under Professor Y. Shrike Zhang, applying machine learning to biomaterials research. Developed predictive models for biomaterial hydrogels, enhanced porosity prediction with neural networks, and tackled complex thermodynamics equation using genetic algorithms. Contributed to real-world applications of AI and ML in medical research, gaining profound insights into their transformative potential.

Projects

Predicting Solubility with Neural Networks

Aug 2023
Designed and implemented predictive models for epoxy solubility, achieving an impressive R-squared (r²) score of 0.997 under varying conditions.

Image-Processing for Pore Size Measurement

Jul 2023
Applied image processing to measure pore sizes in microscopic hydrogel images, showcasing proficiency in theoretical and practical aspects of image analysis.

Courses

Machine Learning Specialization,
DeepLearning.AI, Stanford
Mar 2022

Modern React with Redux, Stephen Grider - Udemy
Feb 2022

Mastering Data Structures & Algorithms using C and C++, Abdul Bari - Udemy
Jul 2021

Learn C++ Programming -Beginner to Advance-Deep Dive in C++, Abdul Bari - Udemy
Feb 2021

The Complete 2021 Web Development Bootcamp,
Angela Yu - Udemy
Feb 2021

CS50, edX - Harvard University
Aug 2020

2020 Complete Python Bootcamp From Zero to Hero in Python, Jose Portilla - Udemy
Jan 2020

Awards

Dean's Award List Year I Sem II,
Universiti Sains Malaysia
2021

Dean's Award List Year 1 Sem 1,
Universiti Sains Malaysia
2021

Topper High School,
Project Model Higher Secondary School
2019

Languages

English (Full working proficiency (C2, 4/4+))

Urdu (Native (C2, 4/4+)) • **Hindi** (Native (C2, 4/4+))

Genetic Algorithm for Solving Complex Thermodynamics Equations

Jun 2023

Applied genetic algorithms to solve intricate thermodynamics equations, offering novel insights into resolving complex systems in materials science.

Enhancing Porosity-Prediction with Neural Networks

May 2023


Contributed to projects enhancing porosity prediction with neural networks, applying advanced techniques to unify predictions from disparate datasets.

Machine-learning driven design of microstructured biomaterial hydrogels

Apr 2023

Collaborated on developing predictive models for biomaterial hydrogels, applying machine learning techniques to analyze diverse datasets.

Gig Getter,

<https://github.com/ryyanrashid01/Gig-Getter> 

Nov 2022 – Jan 2023

Created Gig Getter, connecting users to freelance opportunities for income generation, contributing to Malaysia's employment landscape.

Wordle Solver,

https://ryyanrashid01.github.io/wordle_solver/

Feb 2022

A react based web application that helps in solving the popular online game Wordle.

Android_WeatherApp,

https://github.com/ryyanrashid01/Android_WeatherApp

Jan 2022

Developed an Android app in Java, leveraging the weatherapi.com API for real-time weather data, ensuring a user-friendly experience.

UTF_Extractor,

https://github.com/ryyanrashid01/UTF_Extractor

Dec 2021

Built a web app enabling PDF to TXT conversion using the JAVA PDFBox library. Implemented in PHP, the application seamlessly converts PDF files with Java integration.

Organizations

Aamina Charitable Trust,

Volunteer, Creative Manager, Accounts Manager

Apr 2019 – Jun 2020 | Pulwama, India

Volunteered and managed creative and accounts aspects at Aamina Charitable Trust, honing skills in teamwork, creativity, and financial management.

Skills

Programming Skills

C++, C Language, Python, JavaScript, Java, Node.js, React.js, SQL, MongoDB, MATLAB, GNU Octave, HTML, CSS, jQuery, PHP

Version Control and Other Tools

Git, Docker, Figma, Adobe Photoshop, Adobe Lightroom, Microsoft Office Suite

Data Science and Machine Learning

scikit-learn, SciPy, NumPy, Pandas, TensorFlow

Artificial Intelligence

- Applied AI methodologies in solving complex problems in biomaterials and medical research.
- Worked on projects involving AI-driven design and optimization.

Biomedical Informatics

- Applied computational techniques in a biomedical context.
- Worked with biomaterials and medical data for predictive modeling.

Genetic Algorithms

- Utilized genetic algorithms to solve complex thermodynamics equations.
- Applied evolutionary algorithms for optimization tasks.

Image Processing

- Implemented image processing techniques for analyzing microscopic images.
- Measured pore sizes within hydrogel mixtures using image processing.

Collaboration and Communication

- Collaborated in a multidisciplinary team environment.
- Effectively communicated complex technical ideas to diverse audiences.

References

Dr. Y. Shrike Zhang, Associate Professor, Harvard Medical School
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Dr. Shabir Hassan, Assistant Professor, Khalifa University
shabir.hassan@ku.ac.ae, +971 2 312 5408

Dr. Xiao Kuang, Postdoctoral Research Fellow, Harvard Medical School
xkuang1@bwh.harvard.edu, +1(404)9802377