Raman Yachi Mathur
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EDUCATION

Drexel University, Pennsylvania — Sep '16 - June '21

BS Computer Engineering. Minor in Japanese

Recipient of A.J Drexel Scholarship

Club Soccer player, NIRSA Division Champs

Relevant Coursework:

ECE204: *Microcontrollers*, CS265: *Advanced Programming Techniques*, MATH221: *Discrete Math*, ECE201: *C Programming*, ECE200: *Digital Logic*, CS270: *Mathematical Foundations of Computer Science*

Woodstock School, India — August '14

Graduated with high honours. ACT w/ writing: 34/36

Varsity Soccer. AP Scholar with Distinction

RELEVANT EXPERIENCE

Software engineering intern at Elyah.io, Tokyo — Nov '19 - Jan '20

- Worked with a team towards developing a quantum-computing backend that supports conventional quantum logical gates and algorithms. Done in Rust and WASM.
- Wrote custom quantum gate logic for the front-end using IBM's OpenQASM specifications to facilitate complex quantum circuits.

R&D Intern at Johnson Matthey | Clean Air, Pennsylvania — Sep '18 - April '19

- Developed novel engine control catalysts via fundamental research and tailored synthesis methods.
- Analysed data from myriad testing methods (XRF, IV Vis etc.) to determine catalysis efficiency and feasibility in scaling. Worked extensively with Excel Macros.
- Collaborated with scientists from the Americas, EU, Japan and India on internal and external projects.

Research Scholar at University of Sussex, UK — April '17 - Sep '17

- Studied perovskite solar cells, and how materials such as Zinc Oxide nanorods and graphene-oxide / graphene composites can be used to improve photoconversion efficiency.
- Researched methods of graphene synthesis and deposition that paved way for a novel perovskite solar cell architecture.
- Constructed and programmed an Arduino-controlled spin coater for solar cell fabrication under a vacuum.

SKILLS

Languages: C, Rust, Python, MATLAB, LaTeX, Arduino IDE, Processing.js

Spoken Tongues: Native level fluency in Japanese, English and Hindi.