

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.
- Served as a translator/liaison between the start-up and multinational Japanese corporations. Regarding product-market fit, quantum hardware-software modalities etc.
- Wrote custom quantum gate logic in OpenQASM. Co-ord
- Wrote a quantum program parser using Pest.rs. Aided in co-ordinating the contract between the back and front-end

**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.

## SKILLS

**Languages:** C, Rust, Python, MATLAB,  $\text{\LaTeX}$ , Arduino IDE, Processing.js  
**Spoken Tongues:** Native level fluency in Japanese, English and Hindi.