

Raman Yachi Mathur

Japanese citizen w/ US work authorisation

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## EDUCATION

**Drexel University**, Pennsylvania

Sep '16 - June '21

S.B in Computer Engineering. Minor in Japanese

Recipient of A.J Drexel Scholarship

Club Soccer player, NIRSA Division Champs

**Woodstock School**, India

August '14

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

Varsity Soccer. AP Scholar with Distinction

## RELEVANT EXPERIENCE

**Quantum Software engineering intern at Elyah.io**, Tokyo

Nov '19 - Jan '20

- Contributed to a linear-algebra back-end. Fitted to simulate quantum circuits and algorithms. Written in Rust, deployed via WebAssembly.
- Designed and implemented a proprietary algorithm that computes unitary matrices for N-bit-controlled quantum operations. Written in Rust.
- Served as translator/liaison between the start-up and Japanese corporations interested in quantum computing.

**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, Ruby, MATLAB,  $\text{\LaTeX}$ , Arduino IDE, Processing.js

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