Raman Yachi Mathur | Japanese citizen w/ US work authorisation
+1 215-909-1925 | ramanyachi@gmail.com

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/Frameworks: C, AutoCAD, VHDL, Rust, Python, Ruby, LaTeX, Processing.js
Spoken Languages: Native level fluency in Japanese, English and Hindi.