

# Raman Yachi Mathur

Student

📍 TOKYO / Philadelphia

🌐 r-ym.github.io

🐙 github.com/r-ym

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## BIO

Japanese-Indian passionate about tech.  
Intuitive and eager to learn.  
Interested in ML, OSS & design.

## TECHNICAL SKILLS

C	Python
SQL	Rust
L <sup>A</sup> T <sub>E</sub> X	Git
AutoCAD	VHDL

## EXPERIENCE

- Nov '19 - Mar '20 **Software engineering intern** Elyah, Tokyo  
Developed custom Rust linear-algebra libraries ("crates") for ML and QC simulation purposes.  
Designed and implemented an algorithm to compute unitary matrices for N-bit-controlled quantum operations.  
Rust / Python / WebAssembly
- Sep '18 - Apr '19 **R&D co-op** Johnson Matthey, Pennsylvania  
Developed novel engine control catalysts via fundamental research and tailored synthesis methods.  
Collaborated with scientists from the Americas, EU, Japan and India on internal and external projects.  
Microsoft Office suite / LabVIEW
- Apr '17 - Sep '17 **International Research Scholar** University of Sussex, UK  
Fabricated novel perovskite solar cells to study how materials such as Zinc Oxide nanorods and graphene-oxide / graphene composites can be used to improve photoconversion efficiency.  
Constructed a custom spin-coater with an Arduino for use in a space-restricted glove box. GUI for spin speed, ramp duration etc. developed via Visual Basic.  
C / Visual Basic / AutoCAD

## EDUCATION

- 2016 - 2021 **B.S Computer Engineering** Drexel University, Philadelphia  
Recipient of A.J Drexel Scholarship  
Japanese minor  
Club soccer
- 2012 - 2014 **US diploma w/ high honours** Woodstock School, India  
AP Scholar with Distinction  
ACT w/ writing: 34/36  
Varsity Soccer

## LANGUAGES

**English** - native  
**Japanese** - native  
**Hindi** - native

## HOBBIES

Reading, cooking, football  
weightlifting, writing

## CITIZENSHIP

Japan / India dual citizen with USA  
work authorisation