

# Velo3D VELO<sup>3D</sup>

# I'm Aagam



# I want to intern with you.

# Why?

### I want to be cool like you.



#### I love how you are constantly innovating

# What do I bring to the table?

# I like learning new things.

# I do not rest till I find a solution to the problem.

Some people (my friends) think it is a disease

### I can deal with pressure and deadlines







- 2D materials synthesis
- Additive manufacturing
- Composite manufacturing
- Bio-molecular self assembly
- Density functional theory

- Computer vision
- Deep neural networks
- Active learning
- Bayesian statistics
- Data analysis



#### Characterisation:

SEM, Raman, XRD, UV-Vis, FTIR, DSC Languages:

Python, Bash, MATLAB, JS

#### Software:

Fusion 360, LabVIEW, JMP, Quantum ESPRESSO

#### Additive Manufacturing:

LPBF, FDM, SLA

#### Machine Learning:

Tensorflow, Scikit-learn, PyTorch

# **Tools:** PyQt5, SQLAIchemy

# Who am I?

University of Illinois Urbana-Champaign Ph.D. in MatSE (2024, expected); GPA: 3.56/4

I work on using machine learning to optimise graphene synthesis and laser powder bed fusion



Selected as an NSF Research Trainee in the DIGI-MAT program

Indian Institute of Technology Gandhinagar B.Tech. in MatSE w/ Honours (2019); GPA: 8.49/10

Worked on tuning self assembly of biomolecules to get desirable shapes



Awarded Director's Silver Medal for outstanding overall performance in Materials Science & Engineering.

#### I built a filament winder capable of producing prepreg and winding flywheels at TAMU



# I performed DFT calculations on HPCs to study the adsorption of Nitrogen Monoxide gas on Au, Ir, Rh surfaces at JAIST



# What did I learn from these different experiences?

# Learnt to combine concepts from (seemingly) unrelated domains



# Learnt that research often needs patience

### Learnt to deal with failure



Learnt that everyone around you knows something that you don't

# "DEAR ASK A DOG, WHAT IS YOUR PHILOSOPHY OF LIFE?" WINDER PHILOSOPHY OF LIFE?" BARK, BA

#### Sounds profound

I am looking for a co-op for 6-7 months starting February 2023 Aagam Shah aagam2@Illinois.edu +1 217-213-2496

My conventional resume: <u>https://bit.ly/3t6elcU</u> Inspiration source: <u>https://bit.ly/3TbQnNa</u>