

# DAVID PITT

Math/Computer Science Major

Email: [dpitt@g.hmc.edu](mailto:dpitt@g.hmc.edu)  
Mobile: 919.448.7334  
Github: [dhpitt](#)  
340 W. Foothill Blvd. #765  
Claremont, CA 91711

## OVERVIEW

I am a sophomore math and computer science major at Harvey Mudd College with 3 years of experience using C++, Python and Tensorflow in professional and research settings. I'm seeking software research, quantitative analysis and software engineering internships for summer 2021.

## EXPERIENCE

- JUNIOR R&D ASSOCIATE**  
Nanotronics | Jun - Aug '20  
  
Worked on the Applied Computer Vision R&D team  
Applied tensorflow-gpu deep learning to the correction of thousands of proprietary silicon wafer scans  
Developed a novel Keras CNN architecture to preprocess images for downstream CV use
- MACHINE LEARNING INTERN**  
Harvey Mudd College | Feb - May '20  
  
Worked under the Scientific Computing Specialist  
Revised and developed a series of Jupyter notebook-based machine learning workshops for students in Keras and scikit-learn
- NEUROSCIENCE LAB ASSISTANT**  
Weill Cornell Medical College | Jul '17 - Sept '18  
  
Performed lab assistant duties like cloning and editing plasmid DNA  
Completed independent quantitative research connecting SV proton leak to Parkinson's structural proteins  
Helped write new CUDA-C based time-series neuron image analysis software to replace ImageJ/FIJI
- COMPUTER SCIENCE GRADER/TUTOR**  
Harvey Mudd College | Aug '20 onward  
  
I grade assignments and hold weekly office hours for HMC's CS5 Black, an advanced introductory Python course.

## EDUCATION

- B.Sc., MATHEMATICS AND COMPUTER SCIENCE**  
Harvey Mudd College | Expected May '23  
  
Concentration in Cognitive Science  
3.3 GPA  
Dean's List Honoree: Spring 2020, Fall 2020  
Completed coursework in object-oriented programming, computability, logic and abstract algebra
- GRADUATE**  
Ethical Culture Fieldston School | Sept '16 - May '19  
  
3.93 GPA  
Completed coursework in linear algebra and machine learning  
Founded the school's iOS development club

## ACTIVITIES AND AWARDS

5C Hackathon, Vice President and Sponsorships Team Leader  
Engineers for a Sustainable World, member  
NC State University Chinese speech competition, 3rd place winner

## REFERENCES

Dr. Francis Ortega | Nanotronics Imaging  
Director of Software Engineering  
[fortega@nanotronics.co](mailto:fortega@nanotronics.co)

Dr. Aashita Kesarwani | Harvey Mudd College  
Scientific Computing Specialist  
[akesarwani@g.hmc.edu](mailto:akesarwani@g.hmc.edu)

## SKILLS

Python	OpenCV
Tensorflow	Keras
C++	Git
Java	Academic research
JavaScript	Mandarin Chinese (fluent)

## PROJECTS

**Chaos-Based Encrypton Scheme**  
An encryption algorithm that uses a logistic map to encode information. Python 3.

**N-Body Orbit Simulator**  
A library for simulating and animating n-body orbits using numerical approximation. Python 3/Matplotlib-animate.

