

Mia Chiquier

Ph.D Candidate, Columbia University
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Education

- Columbia University** 2020-Present, *New York, NY.*
Ph.D., Computer Science, GPA: 3.88/4.00
Topic: Audio/Multimodal Deep Learning
Advisor: Carl Vondrick
- University of Pennsylvania** 2015-2019, *Philadelphia, PA.*
B.S., Computer Science, GPA: 3.64/4.00
Major: Computer Science, Minors: Comp. Neuroscience, Mathematics, Systems Engineering
Advisor: Jianbo Shi

Awards and Honors

1. Columbia Center of AI Technology - Amazon Fellowship Recipient Dec. 2020 - Dec. 2022
2. Career Mathematics Achievement Award - Wash. Int. School May 2015

Conference Publications

1. Mia Chiquier, Chengzhi Mao, and Carl Vondrick. "Real-Time Neural Voice Camouflage." *International Conference on Learning Representations (2022)*. **Selected for Oral Presentation.**
2. Chengzhi Mao, Mia Chiquier, Hao Wang, Junfeng Yang, Carl Vondrick. "Adversarial Attacks are Reversible with Natural Supervision." *Proceedings of the IEEE/CVF International Conference on Computer Vision (2021)*.
3. Boyuan Chen, Mia Chiquier, Hod Lipson, Carl Vondrick. "The boombox: Visual reconstruction from acoustic vibrations." *Conference on Robot Learning (2021)*

Work Experience

Columbia University Aug 2020 - Present, *New York, NY.*
Graduate Research Assistant

Research on building interpretable and controllable machines that leverage multimodal signals (e.g. vision, vibration, audio) to creatively perceive and interact with their environment.
Advised by Dr. Carl Vondrick.

Reunion Island University March 2020 - Aug. 2020, *Reunion Island.*
Research Scientist

Implemented machine learning algorithms for short-term and long-term solar energy prediction.

University of Pennsylvania May 2019 - Dec. 2020, *Philadelphia, PA.*
Undergraduate Research Assistant

Developed sequential neural network models to predict the optical flow of vehicles' displacement on the road from sound.
Advised by Dr. Jianbo Shi.

Google Explore Research ProgramNov. 2019 - Nov. 2020, *Philadelphia, PA.*

Undergraduate Researcher

Developed a machine learning pipeline for multilingual Natural Language Processing.

HeuritechMay 2018 - Aug. 2018, *Paris, France.*

Machine Learning Intern

Developed graph and statistics-based algorithms for trend detection in fashion, and worked on the image datasets and CNN-based neural networks for classification.

Analistas Financieros InternacionalesMay 2017 - Aug. 2017, *Madrid, Spain.*

Machine Learning Intern

Developed natural language processing algorithms for classification/prediction purposes.

SpirOpsMay 2016 - Aug. 2016, *Paris, France.*

Machine Learning Intern

Developed algorithms for location estimation for autonomous cars.

Teaching Experience:

Created Embedded SystemsSpring 2022, *New York, NY.*

Course Coordinator

Designed projects at the intersection of embedded systems (ESP32, analog sensors, digital sensors, etc.) and art.

Advanced Computer VisionSummer 2021, *New York, NY.*

Head Teacher's Assistant

Instructed over 80 students in Office Hours once a week, as well as designed homeworks.

Barnard BEARSSept. 2020-Present, *New York, NY.*

Mentor

Teaching and mentoring undergraduate women at Barnard in CS, and computer vision specifically.

Dynamical SystemsSept. 2019-Dec. 2019, *Philadelphia, PA.*

Head Teacher's Assistant

Instructed 75 students in Office Hours 3 hours a week, conducted 2 monthly Review Sessions, and coached students individually.

Press Coverage:

Amazon Science

Feb, 2021

"Columbia Center of AI Technology announces faculty research awards and two PhD student fellowships"

La Recherche

May, 2022

"Un algorithme pour contrer les microphones indiscrets"

Columbia Engineering

April, 2022

"Concerned Your Smartphone is Spying on you?"

Professional Service:

International Conference of Learning Representations Reviewer	2021
Learning from Unlabeled Video Workshop (CVPR) Workshop Organizer	2021
Conference on Computer Vision and Pattern Recognition (CVPR) Reviewer	2022

Computer Skills:

Pytorch, SuperCollider, Max/MSP, MatLab, Hydra, Ignite
Pytorch-Lightning, SQL, Html, Javascript, Python, Java, MatLab

Other Skills:

Fluent (native) in French, Polish, and English, Spanish (Intermediate), Pianist