

Mia Chiquier

Ph.D Candidate, Columbia University
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Education

Columbia University 2020 - Present
Ph.D., Computer Science, GPA: 3.88/4.00
Thesis: Multi-modal Machine Perception with Deep Learning
Advisor: Carl Vondrick

University of Pennsylvania 2015 - 2019
B.S., Computer Science, GPA: 3.64/4.00
Major: Computer Science, Minors: Comp. Neuroscience, Mathematics, Systems Engineering
Advisor: Jianbo Shi

Awards and Honors

Amazon CAIT Fellowship Recipient - Columbia Center of AI Technology 2020 - 2022

Career Mathematics Achievement Award - Wash. Int. School May 2015

Conference Publications

- [Mia Chiquier](#), Carl Vondrick. "Muscles in Action". Accepted to ICCV 2023. <https://arxiv.org/abs/2212.02978>
- Hui Lu, [Mia Chiquier](#), Carl Vondrick. "Private Multiparty Perception for Navigation". Accepted to Neurips 2022. <https://openreview.net/pdf?id=K8cD1Uv3wZy>
- [Mia Chiquier](#), Chengzhi Mao, and Carl Vondrick. "Real-Time Neural Voice Camouflage." *International Conference on Learning Representations* (2022). Oral Presentation (**Top 1.6%**). <https://arxiv.org/abs/2112.07076>
- 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). <https://arxiv.org/abs/2103.14222>
- Boyuan Chen, [Mia Chiquier](#), Hod Lipson, Carl Vondrick. "The boombox: Visual reconstruction from acoustic vibrations." *Conference on Robot Learning* (2021). <https://arxiv.org/abs/2105.08052>

Press Coverage

Science May 2022
"Is technology spying on you? New AI could prevent eavesdropping"
<https://www.science.org/content/article/technology-spying-you-new-ai-could-prevent-eavesdropping>

LeMonde May 2022
"Un algorithme brouille les écoutes en temps réel"
https://www.lemonde.fr/sciences/article/2022/06/14/un-algorithme-brouille-les-ecoutes-en-temps-reel_6130303_1650684.html

Amazon Feb. 2021
"Columbia Center of AI Technology announces faculty research awards and two PhD student fellowships"
<https://www.amazon.science/academic-engagements/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”

<https://www.larecherche.fr/intelligence-artificielle-informatique/un-algorithme-pour-contrer-les-microphones-indiscrets>**Columbia Engineering**

April 2022

“Concerned Your Smartphone is Spying on you?”

<https://www.engineering.columbia.edu/news/block-smartphone-microphone-speech-recognition-spying>**Work Experience****Columbia University**

Aug 2020 - Present

Graduate Research Assistant

Research on building interpretable and controllable machines that leverage multimodal signals to creatively perceive and interact with their environment. Advised by Dr. Carl Vondrick.

Reunion Island University

March 2020 - Aug. 2020

Machine Learning Research Scientist

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

Google Explore Research Program

Nov. 2019 - Nov. 2020

Undergraduate Researcher

Implemented a machine learning pipeline for multilingual Natural Language Processing.

Heuritech

May 2018 - Aug. 2018

Machine Learning Intern

Implemented 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 Internacionales

May 2017 - Aug. 2017

Machine Learning Intern

Implemented natural language processing algorithms for classification/prediction purposes.

SpirOps

May 2016 - Aug. 2016

Machine Learning Intern

Developed algorithms for location estimation for autonomous cars.

Teaching Experience**Advanced Computer Vision**

Summer 2021

Head Teacher's Assistant

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

Barnard BEARS

Sept. 2020 - Present

Mentor

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

Professional Service

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| 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 |
| Quo Vadis, Computer Vision? Workshop (ICCV) Workshop Organizer | 2023 |

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