

# Aaron Lou

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<b>Education</b>	<b>Cornell University</b> B.A. in Computer Science, B.A. in Mathematics Ithaca, NY   GPA: 3.96/4.0	Aug 2017 - May 2021
<b>Conference Publications</b>	<b>Aaron Lou*</b> , Isay Katsman*, Qingxuan Jiang*, Serge Belongie, Ser-nam Lim, & Christopher De Sa. “Differentiating through the Fréchet Mean”. In <i>ICML: the Thirty-seventh International Conference on Machine Learning</i> , July 2020.	
<b>Workshop Publications</b>	<b>Aaron Lou*</b> , Derek Lim*, Isay Katsman*, Leo Huang*, Qingxuan Jiang, Ser-nam Lim, & Christopher De Sa. “Neural Manifold Ordinary Differential Equations”. In <i>INNF+ 2020: ICML Workshop on Invertible Neural Networks, Normalizing Flows, and Explicit Likelihood Models</i> , July 2020. <b>(spotlight)</b> .  Horace He, <b>Aaron Lou*</b> , Qingxuan Jiang*, Isay Katsman*, Serge Belongie, & Ser-nam Lim. “Adversarial Example Decomposition”. In <i>SPML 2019: ICML Workshop on Security and Privacy in Machine Learning</i> , June 2019.	
<b>Research Experience</b>	<b>Facebook AI</b> Research Intern   New York, NY <ul style="list-style-type: none"><li>• Topology and data augmentation w/ Ser-Nam Lim.</li><li>• Manifold learning w/ Brandon Amos &amp; Maximilian Nickel</li></ul> <b>Cornell University Vision and Learning</b> Undergraduate Researcher   Ithaca, NY <ul style="list-style-type: none"><li>• Geometric machine learning w/ Christopher De Sa.</li><li>• Adversarial examples w/ Serge Belongie &amp; Ser-Nam Lim.</li></ul>	May 2020 - Aug 2020  Aug 2018 - Present
<b>Industry Experience</b>	<b>Google</b> Software Engineering Intern   Mountain View, CA <ul style="list-style-type: none"><li>• Google Maps incognito mode w/ Satwika Sarkar</li></ul>	May 2019 - Aug 2019
<b>Awards</b>	ICPC North American Championship Bronze Medal ICPC Greater New York Regional Champion Putnam Exam Top 250 Cornell Freshman Math Exam Champion	Feb 2020 Oct 2019 Dec 2018 May 2018
<b>Teaching</b>	CS 5199 - Competitive Programming TA for CS 2802 - Honors Discrete Structures	Spring 2019, Fall 2019 Spring 2019

<b>Service</b>	<b>Mentorship</b>	
	CUVL Co-President	May 2020 - Present
	– Led organization in promoting and providing resources for undergraduate research in machine learning.	
	<b>Community Contributions</b>	
	NeurIPS 2020 - Secondary Reviewer	
<b>Invited Talks</b>	Spotlight talk at ICML INNF Workshop	Jul 2020
<b>Graduate Coursework</b>	Completed during undergrad at Cornell (5xxx is masters, 6xxx is PhD)	
	<ul style="list-style-type: none"> <li>• CS 6784 – Deep Generative Models</li> <li>• CS 6787 – Advanced Machine Learning Systems</li> <li>• ECE 5630 – Information Theory</li> <li>• Math 6110 – Real Analysis</li> <li>• Math 6120 – Complex Analysis</li> <li>• Math 6310 – Abstract Algebra I</li> <li>• Math 6320 – Abstract Algebra II</li> <li>• Math 6410 – Combinatorics</li> <li>• Math 6520 – Differentiable Manifolds</li> </ul>	