

# JUNWEI DENG - Curriculum Vitae

---

junweid2@illinois.edu — 217-974-6501 — theaperdeng.github.io

<b>EDUCATION</b>	<b>University of Illinois Urbana-Champaign</b> , United States <i>Ph.D. in Information Sciences</i> <ul style="list-style-type: none"><li>• <b>Advisor:</b> Prof. Jiaqi Ma</li></ul>	GPA: 3.90/4.00 <i>2023.9 - now</i>
	<b>University of Michigan</b> , United States <i>M.S. in Information</i>	GPA: 3.89/4.00 <i>2019.9 - 2021.4</i>
	<b>Shanghai Jiao Tong University</b> , P.R. China <i>B.S.E. in Electrical and Computer Engineering</i>	GPA: 3.71/4.00 <i>2016.9 - 2020.8</i>
<b>RESEARCH INTERESTS</b>	Trustworthy ML (e.g., robustness, fairness); Developing technical solutions for operationalizing regulatory principles (e.g., copyright issue for generative AI)	
<b>SELECTED PAPERS</b>	<ul style="list-style-type: none"><li>• <b>J. Deng</b>, J. Ma. <i>Computational Copyright: Towards A Royalty Model for AI Music Generation Platforms</i>. <b>Preprint</b>.</li><li>• J. Ma*, <b>J. Deng*</b>, Q. Mei. <i>Subgroup Generalization and Fairness of Graph Neural Networks</i>. <b>NeurIPS 2021 (Spotlight, top 3%)</b>.</li><li>• J. Ma*, <b>J. Deng*</b>, Q. Mei. <i>Adversarial Attack on Graph Neural Networks as An Influence Maximization Problem</i>. <b>WSDM 2022</b>.</li></ul> (* stands for equal contribution)	
<b>WORK EXPERIENCE</b>	<b>Intel</b> , P.R. China <i>AI Frameworks Engineer</i>	<i>2021.5-2023.7</i> <ul style="list-style-type: none"><li>• Design and partially implement "bigdl-llm", "bigdl-nano", and "bigdl-Chronos" which collected more than 4K stars.</li><li>• More than 20000 lines open-source project contribution, over 300 pull requests' code review; More than 50 API design; More than 10 promotion/tech talk.</li></ul>
<b>SELECTED PROJECTS</b>	<ul style="list-style-type: none"><li>• <b>bigdl-llm</b>: is a library for running LLM (large language model) on Intel XPU using INT4/FP4/INT8/FP8.</li><li>• <b>bigdl-nano</b>: is a Python package to transparently accelerate PyTorch and TensorFlow applications on Intel XPU.</li><li>• <b>bigdl-chronos</b>: is an application framework for building a fast, accurate and scalable time series analysis application.</li></ul>	
<b>AWARDS &amp; SCHOLARSHIP</b>	<ul style="list-style-type: none"><li>• <b>Explorer Scholarship (2020)</b>, for outstanding students who went aboard for their graduate study provided by Shanghai Jiao Tong University.</li><li>• <b>Shanghai Outstanding College Graduate (2020)</b>, for outstanding students graduated in Shanghai.</li><li>• <b>National Scholarship (2018)</b>, the highest award provided by Ministry of Education in P.R. China.</li></ul>	
<b>SKILL</b>	<ul style="list-style-type: none"><li>• <b>Language:</b> Python, C++, Git, Markdown, Shell, L<sup>A</sup>T<sub>E</sub>X</li><li>• <b>Framework:</b> Pytorch, Tensorflow, CUDA, Spark</li><li>• <b>English:</b> TOEFL 107/120 (Speaking: 25)</li></ul>	