NeurIPS 2020

Sun Dec 6th through Sat the 12th https://neurips.cc/Conferences/2020

Call For Papers

Abstract submission deadline: May 27, 2020 01:00 PM PDT

Full paper submission deadline: Jun 05, 2020 01:00 PM PDT

Co-author registration deadline: Jun 06, 2020 01:00 PM PDT

Supplementary material submission deadline: Jun 11, 2020 01:00 PM PDT

Camera-ready final submission deadline: Oct 22, 2020 01:00 PM PDT or 03 weeks 05 days 19:15:00

Submit at: https://cmt3.research.microsoft.com/NeurIPS2020/

The site will start accepting submissions on May 12th.

We invite submissions for the Thirty-Fourth Annual Conference on Neural Information Processing Systems (NeurIPS 2020), a multi-track, interdisciplinary conference that brings together researchers in machine learning, computational neuroscience, and their applications. Subject areas are listed below in brief, and in full here.

- 1. **Algorithms**: Active Learning; Classification; Clustering; Multitask and Transfer Learning; Regression; Sparsity and Compressed Sensing; Stochastic Methods; Unsupervised Learning, etc.
- 2. **Applications**: Audio and Speech Processing; Computational Biology; Computer Vision; Fairness, Accountability, and Transparency; Natural Language Processing; Robotics; Time Series Analysis; etc.
- 3. **Data, Competitions, Implementations, and Software**: Benchmarks; Competitions or Challenges; Data Sets or Data Repositories; Software Toolkits.
- 4. **Deep Learning**: Adversarial Networks; Deep Autoencoders; Generative Models; Optimization for Deep Networks; Recurrent Networks; Supervised Deep Networks; etc.
- 5. **Neuroscience and Cognitive Science**: Brain Imaging; Brain--Computer Interfaces; Cognitive Science; Connectomics; Memory; Neural Coding; Perception; Plasticity and Adaptation; etc.
- 6. **Optimization**: Combinatorial Optimization; Convex Optimization; Non-Convex Optimization; Submodular Optimization.
- 7. **Probabilistic Methods**: Bayesian Nonparametrics; Belief Propagation; Causal Inference; Gaussian Processes; Graphical Models; Latent Variable Models; Variational Inference; etc.
- 8. **Reinforcement Learning and Planning**: Decision and Control; Exploration; Hierarchical RL; Markov Decision Processes; Multi-Agent RL; Navigation; Planning; etc.
- 9. **Theory**: Computational Complexity; Control Theory; Game Theory; Information Theory; Large Deviations and Asymptotic Analysis; Statistical Physics of Learning; etc.
- 10. Social Aspects of ML: Al Safety; Fairness and Accountability; Privacy

In addition to these core subjects, we welcome papers that use machine learning and computational neuroscience to contribute to understanding, treatment, and prevention of COVID-19.

Significant changes to the reviewing process follow; please read carefully and watch the accompanying video:

- 1. There is a mandatory abstract submission deadline on May 27, 2020 01:00 PM PDT, one week before full submissions are due. While it will be possible to make minor edits to the title and abstract until the full paper submission deadline, submissions with "placeholder" abstracts which are rewritten entirely for the full submission may be removed without consideration. It will not be possible to modify the author list nor the author order after the abstract submission deadline. Note: we are allowing changes to the author list until the full paper deadline. After that, no changes will be permitted for any reason, including for the camera-ready version.
- 2. All authors are required to login and fill out a user information form in CMT by Jun 06, 2020 01:00 PM PDT. Because of the rapid growth of NeurIPS, all authors and co-authors are expected to be available to review papers, if asked to do so. If all co-authors do not register and enter their information, their submission may be desk rejected.
- 3. In order to cope with the growing number of submissions, this year we will adopt an "early desk-reject" process involving only Area Chairs and Senior Area Chairs. Area Chairs will be responsible for identifying papers that are very likely to be rejected, and Senior Area Chairs will cross check the selections. These papers will not be further reviewed, and authors will be notified immediately.
- 4. Authors need to declare if a previous version of their submission was rejected at any peer-reviewed venue within the past 12 months, and, if so, summarize the changes to the current version. This information should be entered into CMT during the submission process.
- 5. In order to provide a balanced perspective, authors are required to include a statement of the potential broader impact of their work, including its ethical aspects and future societal consequences. Authors should take care to discuss both positive and negative outcomes.
- 6. Authors are required to provide an explicit disclosure of funding (financial activities supporting the submitted work) and competing interests (related financial activities outside the submitted work) that could result in conflicts of interest. This section should be added to the camera-ready version of accepted papers. More information can be found here.
- 7. We strongly encourage (but do not require) accompanying code and data to be submitted with accepted papers that contribute and present experiments with a new algorithm or new dataset. Moreover, we encourage authors to upload their code as part of their supplementary material at submission time in order to help reviewers assess the quality of the work. Check the policy, guidelines and templates for code submission for further details.
- 8. As an additional step to make NeurIPS content accessible to those unable to attend the conference, authors of accepted submissions will be required to provide a link to all the following accompanying materials by the camera ready deadline:
- · 3-minute video summarizing the paper
- · PDF of slides summarizing the paper
- · PDF of the poster used at the conference

Authors will be asked to confirm that their submissions accord with the NeurIPS code of conduct.

Formatting instructions: All submissions must be in PDF format. Submissions are limited to eight content pages, including all figures and tables; additional pages containing a statement of broader impact, acknowledgements and funding disclosures, and references are allowed. You must format your submission using the NeurlPS 2020 LaTeX style file which includes a "preprint" option for non-anonymous preprints posted online.

The maximum file size for submissions is 50MB. Submissions that violate the NeurIPS style (e.g., by decreasing margins or font sizes) or page limits may be rejected without further review. If your submission is accepted, you will be allowed a ninth content page for the camera-ready version.

Supplementary material: Authors may submit up to 100MB of supplementary material, such as appendices, proofs, derivations, data, or source code; all supplementary materials must be in PDF or ZIP format. Supplementary material should be material, created by the authors, that directly supports the submission content. Like submissions, supplementary material must be anonymized. To submit supplementary material, first upload your submission. You will then be able to upload supplementary material from the author console. Looking at supplementary material is at the discretion of the reviewers.

Evaluation criteria: Submissions that violate the NeurIPS style or page limits, are not within the scope of NeurIPS (see subject areas), are in submission elsewhere, or have already been published elsewhere may be rejected without further review. Submissions that have fatal (confirmed) flaws revealed by the reviewers—including incorrect proofs, flawed or insufficient wet-lab, hardware, or software experiments—may be rejected on that basis, without taking into consideration other criteria. Other submissions will be judged on the basis of their technical quality, novelty, potential impact, and clarity. Typical NeurIPS papers often (but not always) include a mix of algorithmic, theoretical, and experimental results, in varying proportions. While theoretically grounded arguments are encouraged, it is counterproductive to add "decorative math" whose primary purpose is to make the submission look more substantial or even intimidating, without adding significant insight. Algorithmic contributions should have at least an illustration of how the algorithm might eventually materialize into a machine learning application. Submissions will also be considered on ethical grounds. Regardless of scientific quality or contribution, a submission may be rejected for ethical considerations, including methods, applications, or data that create or reinforce unfair bias or that have a primary purpose of harm or injury.

Double-blind reviewing: The reviewing process will be double blind at the level of reviewers and area chairs (i.e., reviewers and area chairs cannot see author identities) but not at the level of senior area chairs and program chairs. During the desk rejection phase, the process will be double blind for senior area chairs as well, who will not be able to see the author's identity. As an author, you are responsible for anonymizing your submission. In particular, you should not include author names, author affiliations, or acknowledgements in your submission and you should avoid providing any other identifying information (even in the supplementary material). If you need to cite one of your own papers, you should do so with adequate anonymization to preserve double-blind reviewing. For instance, write "In the previous work of Smith et al. [1]..." rather than "In our previous work [1]..."). If you need to cite one of your own papers that is in submission to NeurlPS and not available as a non-anonymous preprint, then include a copy of the cited submission in the supplementary material and write "Anonymous et al. [1] concurrently show..."). Supplementary materials and code should also be anonymized (including, for instance, hardcoded paths or URLs that may give away login identifiers or institution).

Preprints: The existence of non-anonymous preprints (on arXiv, social media, websites, etc.) will not result in rejection. If you choose to use the NeurIPS style for the preprint version, you must use the "preprint" option rather than the "final" option. However, note that your submission to CMT must be always anonymized regardless of whether a preprint has been released. Reviewers will be instructed not to actively look for such preprints, but encountering them will not constitute a conflict of interest. Authors may submit anonymized work to NeurIPS that is already available as a preprint (e.g., on arXiv) without citing it; however, previously published papers by the authors on related topics must be cited (with adequate anonymization to preserve double-blind reviewing).

Dual submissions: Dual submissions will be identified via a combination of automated methods and human (reviewer, area chair, senior area chair, program chair) judgment. NeurIPS coordinates with other conferences to identify dual submissions. Submissions that are identical or substantially similar to papers that are in submission to, have been accepted to, or have been published in other archival conferences, journals, workshops, etc. will be deemed dual submissions. Submissions that are identical or substantially similar to other NeurIPS submissions will also be deemed dual submissions; submissions should be distinct and sufficiently substantial.

Note that slicing contributions too thinly may result in submissions being deemed dual submissions. Specifically, a case of slicing too thinly may correspond to two submissions by the same authors that are so similar that publishing one would render the other too incremental to be accepted. The program chairs reserve the right to reject all NeurIPS submissions by all authors of dual submissions, not just those deemed dual submissions. The NeurIPS policy on dual submissions applies for the entire duration of the reviewing process (i.e., from the submission deadline to the notification date). Authors should contact the program chairs if they need further clarification.

Citation and Comparison: Papers are expected to cite all refereed publications relevant to their content, but authors are excused for not knowing about all non-refereed work (e.g, those appearing on ArXiv). Papers (whether refereed or not) appearing less than two months before the submission deadline are considered contemporaneous to NeurIPS submissions; authors are not obligated to make detailed comparisons to such papers (though, especially for the camera ready versions of accepted papers, authors are encouraged to).

Author responses: Authors will have one week to view and respond to initial reviews. All author responses must be in PDF format. Author responses are limited to one page, including all figures, tables, and references, in the NeurIPS "author response" style; you must use the NeurIPS 2020 author response LaTeX style file. Author responses must not contain external links. The program chairs reserve the right to solicit additional reviews after the author response period.

Publication of submissions: After decisions have been made, reviews, meta-reviews, and author responses for accepted submissions will be made public (but reviewer, area chair, and senior area chair identities will remain anonymous). Camera-ready papers will be due in advance of the conference. Authors will have the opportunity to submit code together with their paper, as per the Code Submission Policy. Finally, authors will be allowed to make minor changes, such as fixing typos or adding references, for a short period of time after the conference.

Toronto Paper Matching System and OpenReview: NeurIPS uses the Toronto Paper Matching System (TPMS) and OpenReview in order to assign submissions to reviewers and area chairs. During the submission process, you will be asked to agree to the use of these systems for your submission.

Competitions, Demonstrations, Tutorials, and Workshops: There are separate tutorial, workshop, competition, and demonstration tracks at NeurIPS 2020. Authors who wish to submit to these tracks should consult the appropriate calls for submission.

Frequently asked questions can be found here.

Hsuan-Tien Lin, Maria-Florina Balcan, Raia Hadsell, Marc'Aurelio Ranzato NeurIPS 2020 Program Chairs

Hugo Larochelle NeurlPS 2020 General Chair