

## Computer Science

Session **J**

Room: 128 Baxter

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|----------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1:00 - 1:20 PM | <b>Hongqiao Chen</b><br><i>Hannah Bradley SURF Fellow</i>  | How do multimodal language models reason about space and time?                                           | Pietro Perona<br><i>Allen E. Puckett Professor of Electrical Engineering</i><br>Georgia Gkioxari<br><i>Assistant Professor of Computing and Mathematical Sciences and Electrical Engineering; William H. Hurt Scholar</i><br>Raphaela H. Kang<br><i>Graduate Student in Computation and Neural Systems</i>                                                                    |
| 1:20 - 1:40 PM | <b>Olivia Y. Wang</b><br><i>The Associates SURF Fellow</i> | Rigorous investigation of human baselines towards more comprehensive VQA benchmarks and robust VLMs      | Pietro Perona<br><i>Allen E. Puckett Professor of Electrical Engineering</i><br>Katelyn Haly<br><i>Graduate Student in Neurobiology</i><br>Raphaela H. Kang<br><i>Graduate Student in Computation and Neural Systems</i>                                                                                                                                                      |
| 1:40 - 2:00 PM | <b>Annika S. Viswesh</b>                                   | Knowledge graph-informed predictions of multigene transcriptional profiles                               | Pradeep Ravikumar<br><i>Professor of Machine Learning, Carnegie Mellon University</i><br>Chandler Squires<br><i>Postdoctoral Research Associate in Machine Learning, Carnegie Mellon University</i><br>Frederick D. Eberhardt<br><i>Professor of Philosophy</i>                                                                                                               |
| 2:00 - 2:20 PM | <b>Ritvik S. Teegavarapu</b>                               | Gibbs conditioning principles for Markovian discrete-time interacting particle systems on regular graphs | Kavita Ramanan<br><i>Professor of Applied Mathematics, Brown University</i><br>Sarath Yasodharan<br><i>Assistant Professor of Industrial Engineering and Operations Research, Brown University</i><br>I-Hsun Chen<br><i>Graduate Student in Applied Mathematics, Brown University</i><br>Franca Hoffmann<br><i>Assistant Professor of Computing and Mathematical Sciences</i> |

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| 2:20 - 2:40 PM | <b>Aaron M. Dumas</b>                                                          | Safe offline reinforcement learning in noisy environments with digital twin-supported medical decision making | Rose Yu<br><i>Associate Professor of Computer Science and Engineering, University of California, San Diego</i><br>Aysin Tumay<br><i>Graduate Student in Computer Science and Engineering, University of California, San Diego</i><br>Eric V. Mazumdar<br><i>Assistant Professor of Computing and Mathematical Sciences and Economics</i> |
| 2:40 - 3:00 PM | <b>Justin Luo</b><br><i>Carl F. Braun SURF Fellow</i>                          | Task-aware mesh decomposition for Sim2Real robotics learning                                                  | Hao Su<br><i>Associate Professor of Computer Science, University of California, San Diego</i><br>Gunter Niemeyer<br><i>Teaching Professor of Mechanical and Civil Engineering</i>                                                                                                                                                        |
| 3:00 - 3:10 PM | <b>BREAK</b>                                                                   |                                                                                                               |                                                                                                                                                                                                                                                                                                                                          |
| 3:10 - 3:30 PM | <b>Ellie J. Wang</b>                                                           | Implementing finite element modeling in the MS-Human-700 musculoskeletal model                                | Yanan Sui<br><i>Associate Professor of Computer Science, Tsinghua University</i><br>Joel W. Burdick<br><i>Richard L. and Dorothy M. Hayman Professor of Mechanical Engineering and Bioengineering; Research Scientist, JPL</i>                                                                                                           |
| 3:30 - 3:50 PM | <b>Erica Wang</b><br><i>Mellon Mays SURF Fellow</i>                            | Modular motion tokenization for high-dimensional motor control: A case study on MS-Human-700                  | Yanan Sui<br><i>Associate Professor of Computer Science, Tsinghua University</i><br>Adam C. Wierman<br><i>Carl F Braun Professor of Computing and Mathematical Sciences</i>                                                                                                                                                              |
| 3:50 - 4:10 PM | <b>Yingyin Tan</b>                                                             | Adaptive modeling and exogenous support for neuromotor-impaired musculoskeletal models                        | Yanan Sui<br><i>Associate Professor of Computer Science, Tsinghua University</i><br>Gunter Niemeyer<br><i>Teaching Professor of Mechanical and Civil Engineering</i>                                                                                                                                                                     |
| 4:10 - 4:30 PM | <b>Gautham Kappaganthula</b><br><i>Citadel Global Fixed Income SURF Fellow</i> | Learning affine maps for an amortized noise-agnostic filter                                                   | Andrew M. Stuart<br><i>Bren Professor of Computing and Mathematical Sciences</i><br>Bohan Chen<br><i>Postdoctoral Scholar Research Associate in Computing and Mathematical Sciences</i>                                                                                                                                                  |