The Fall 2021 HiPerGator Symposium

Thursday, October 21

IN-PROGRESS RESEARCH SUPPORTED BY HIPERGATOR

LIGHTNING ROUND TALKS & POSTER SÉSSIONS

Attendance Open to All.

Presentations/Poster Sessions Open to Post-Docs and Students

Fall 2021 HiPerGator Symposium
Thursday, October 21, 2021
9:00 a.m. – 1:00 p.m.
Virtual Event

Presented by:



Symposium Agenda

9:00 AM Welcome, Opening Remarks

Alicia Turner

Director – UFIT Customer Experience and Resource Planning

9:10 AM Overview of UF AI Initiative

David P. Norton, Ph.D.

Vice President for UF Research

9:20 AM Keynote: The Experience of Building GatorTron—The Largest Clinical Language Model

Jiang Bian, Ph.D.

Director of Cancer Informatics and eHealth Core – UF Health Cancer Center Associate Professor – Department of Health Outcomes and Biomedical Informatics, College of Medicine

9:40 AM Lightning Talks

9:40 AM Natural Language Analysis of Digital Collections: Baldwin Library of Historical Children's

Literature and EDIS Agricultural Extension Publications

Howard Beck, Ph.D., Professor – Department of Agricultural and Biological Engineering,

College of Agricultural and Life Sciences

9:50 AM Al-driven Movement Classification and Analysis across Clinical and Cultural

Application Areas

Wenbin Guo, Ph.D., Postdoctoral Associate – UF Digital Worlds Institute, College of the

Arts

10:00 AM Interdisciplinary AI for Spatiotemporal Data in Earth Science Applications

Zhe Jiang, Ph.D., Director of Interdisciplinary Data Science and AI Lab, Assistant Professor

— Department of Computer and Information Science and Engineering, Herbert Wertheim

College of Engineering

10:10 AM An End-to-end Artificial Peptide Aptamer Generation Strategy for Driving Precision

Drug Delivery

Zachary Greenberg, Graduate Research Assistant – He Laboratory and Ph.D. Student –

College of Pharmacy

10:20 AM Machine Learning Potentials for Amorphous Materials Modeling and Simulations

Jun Jiang, Ph.D., Assistant Scientist – Department of Physics, College of Liberal Arts

and Sciences

10:30 AM 10-Minute Break

10:40 AM DYNAMITE: A Phylogenetic Tool for Identification of Dynamic Transmission Epicenters Brittany Rife Magalis, Ph.D., Research Assistant Scientist – Department of Pathology, Immunology and Laboratory Medicine, College of Medicine 10:50 AM Exploring the Structure of Submarine Flows Through Massive, High-fidelity Simulations Santiago Zúñiga, Graduate Student – Department of Mechanical and Aerospace Engineering, Herbert Wertheim College of Engineering 11:00 AM Automatic, Accelerated Semiconductor Characterization from Time-Resolved Photoluminescence Data through Iterated Bayesian Inferencing Calvin Fai, Graduate Student – Department of Chemical Engineering, Herbert Wertheim College of Engineering 11:10 AM A Material Informatics Approach to Genetic Algorithms Jason Gibson, Ph.D. Student – Department of Materials Science and Engineering, Herbert Wertheim College of Engineering 11:20 AM Approximate Bayesian Computation for Immune Parameters Estimation of Campylobacter Infection Dynamics in Young Children from Low-resources Settings Nitya Singh, Ph.D., Assistant Scientist – Emerging Pathogens Institute and Department of Animal Sciences, College of Agricultural and Life Sciences 11:30 AM Multiple Control of Few-layer Janus MoSSe Systems Shuanglong Liu, Ph.D., Postdoctoral Researcher – Department of Physics, College of **Liberal Arts and Sciences** 11:40 AM Symmetry-preserving Deep Learning for Enhanced Euler-Lagrange Simulations Bhargav Sriram Siddani, Ph.D. Student – Department of Mechanical and Aerospace Engineering, Herbert Wertheim College of Engineering Informed Consent Question Answering 11:50 AM Zachery Steven Utt, Undergraduate Student – Department of Computer and Information Science and Engineering, Herbert Wertheim College of Engineering

12:00 PM 10-Minute Break

12:10 PM Poster Session

DYNAMITE: A Phylogenetic Tool for Identification of Dynamic Transmission Epicenters Brittany Rife Magalis, Ph.D., Research Assistant Scientist – Department of Pathology, Immunology and Laboratory Medicine, College of Medicine

Approximate Bayesian Computation for Immune Parameters Estimation of Campylobacter Infection Dynamics in Young Children from Low-resources Settings Nitya Singh, Ph.D., Assistant Scientist – Emerging Pathogens Institute and Department of Animal Sciences, College of Agricultural and Life Sciences

Multiple Control of Few-layer Janus MoSSe Systems
Shuanglong Liu, Ph.D., Postdoctoral Researcher – Department of Physics, College of Liberal Arts and Sciences

Automatic, Accelerated Semiconductor Characterization from Time-Resolved Photoluminescence Data through Iterated Bayesian Inferencing Calvin Fai, Graduate Student – Department of Chemical Engineering, Herbert Wertheim College of Engineering

User Requirements for Augmented Reality-based Bridge Principal Inspection
Sameer Mohata, Graduate Research Assistant – M.E. Rinker, Sr. School of Construction
Management, College of Design, Construction and Planning

1:00 PM 2021 Fall HiPerGator Symposium Concludes