# Selection of a Summer Research Topic

Please select no more than two topics that you are interested in exploring as a MICUP Research Scholar.

**Generative AI Fiction (Dr. Paula Lauren).** Dive into the future of storytelling with our four-week intensive course on Generative AI in Fiction. By the end of the program, not only will you have a profound understanding of the interplay between AI and fiction, but you'll also have a masterpiece that's a blend of human creativity and AI capabilities.

**Artificial Intelligence Art (Dr. CJ Chung).** Generative AI art is created by deep learning models that are trained on existing art. The models learn styles of art images and then generate new art when prompted by a human through text. This research project will explore, experiment, and evaluate generative AI art technologies/tools.

**Detroit Working Class Literature (Dr. Paul Jaussen).** This project will focus on archival research to examine and explore the way Detroit's unique culture of factory labor served as a backdrop to literary production.

**Societal Impacts of Immersive Virtual Reality (Dr. Franco Delogu).** This research area will provide students with a direct research experience with Virtual Reality research. The experience includes both theory and practical activities and focuses on how VR can impact society via virtual training, testing and assessment.

**Chemistry and the Development of a Catalyst (Dr. Meng Zhou).** This project focuses on the synthesis and characterization of a metal catalyst to produce urea fertilizer from carbon dioxide. **Number of Students:**

**Physics in the Community (Dr. Bhubanjyoti Bhattacharya).** This research project is computer-based and focused on theoretical particle physics. The Scholars will receive hands-on training in the mathematical and programming software to conduct research.

**Mathematical Biology in the Community (Dr. Matthew Johnson and Dr. Bruce Pell).** This experience will include two weeks of instruction followed by two weeks of research focused on mathematical biology. This research project will use mathematical modeling to investigate the impact of COVID-19 within our communities.