Course program and reading list  
Semester 2 Year 2022

School: Efi Arazi School of Computer Science M.Sc.

Learning and Graphics Seminar: Virtual Humans

Lecturer:
Dr. Ohad Fried  ofried@idc.ac.il

<table>
<thead>
<tr>
<th>Course No.:</th>
<th>Course Type :</th>
<th>Weekly Hours :</th>
<th>Credit:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3662</td>
<td>Seminar</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Course Requirements :  
Final Paper

Group Code : 222366200  
Language: Hebrew

Prerequisites

Equivalent:
164 - Introduction to Computer Graphics

Prerequisite:
52 - Calculus I  
53 - Calculus II  
54 - Linear Algebra I  
55 - Linear Algebra II  
56 - Discrete Mathematics  
59 - Data Structures  
69 - Logic And Set Theory  
417 - Introduction To Computer Science
We will learn about digital humans, including scanning, modeling, rendering and animation of high-fidelity virtual characters. We will learn both classic methods, and recent advances in the field that leverage machine learning. Students will present papers each week, and the main goal is to have a prolific and fun discussion.

---

**Course Goals**

- Learn about digital humans, including scanning, modeling, rendering and animation of high-fidelity virtual characters.
- Learn to critically read and evaluate research papers.

---

**Grading**

- Understanding (did the student grasp the main ideas and the details of the papers): 40%
- Explanation (how well were the ideas conveyed to others): 40%
- Presentation (slide quality, interaction, demos, question answering, etc.): 20%
- A bonus might be given for particularly complicated papers, exceptional class participation, etc.

---

**Reading List**

-