Programming languages is the field which studies classes of programs in order to analyze them, verify their properties, manipulate, and generate them. PL research views the programming language as one with a central place in solving computing problems, and as such focuses on the kinds of solutions the abstractions a programming language provides are capable of offering.

In this seminar we will examine methods for source code analysis and manipulation of programs, and consider design, implementation, theory, and applications. Moreover, we will take a broad view of programming languages, considering not only new languages but tooling, verification, code generation, research that touches on the process in which code is written, and the human-PL interface.

The course will combine lectures by the instructor with independent reading in a seminar format. The students will read important papers in the field and will present them in class along with their background.

- Attendance is mandatory. Classes will be held according to the Technion’s instructions (physical/online/hybrid) at the start of the semester.
- Students are expected to familiarize themselves with each paper prior to class and answer a brief questionnaire about each paper.
- Undergraduate students will present papers in pairs. Graduate students will present one paper each.
- There is no exam.

Please email the following information to Hila Peleg:

- Name and ID.
- Whether you are a graduate or undergraduate student (which semester).
- Related courses you took.
- Other relevant information such as related projects, etc.