# CSCI 334: Principles of Programming Languages

Lecture 12: Designing ASTs

Instructor: Dan Barowy
Williams

### Your to-dos

- 1. Do this week's quiz (take home).
- 2. Read Parsing for next week's lab.
- 3. Lab 8, due Wednesday, April 16 (partner lab). Give yourself enough time to do this one.

## **Topics**

**Designing ASTs** 

#### Announcements

- Class of 1960's speaker series: Tim Kraska, MIT!
- Generative AI is Overhyped But Real, Thurs, Apr
   10 @ 7:30pm in Wachenheim Auditorium
- ML and Generative AI for Data Systems, Thurs,
   Apr 11 @ 2:35pm in Wege Auditorium



Tim Kraska is an Associate Professor of Electrical Engineering and Computer Science in MT's Computer Science and Artificial Intelligence Laboratory, co-director of the new GenAl Impact Initiative at MIT, a director of applied science at Amazon Web Services (AWS), and was a co-founder of Instancio and of Einblick Analytics (both acquired). Currently, his research focuses on using MIL/GAI for (data) systems and agentic systems. Before joining MIT, Tim was an Assistant Professor at Brown and spent time at Google Brain. Tim is a 2017 Alfred P. Sloan Research Fellow in computer science and received several awards including the VLDB Early Career Research Contribution Award, the Intel Outstanding Researcher Award, the VMware Systems Research Award, the university-wide Early Career Research Achievement Award at Brown University, an NSF CAREER Award, as well as several best paper and demo

#### **Announcements**

Please consider being a TA next semester (especially for this class!)

Applications due Friday, April 18.

https://csci.williams.edu/tatutor-application/



Many of the tasks ahead will **feel abstract** until you **try them**.

Dive in. Learn by doing.

Language of Lines

## Recap & Next Class

## Today:

Designing an AST

#### Next class:

Program evaluation