Computer Systems Architecture

JAMES ZHANG[*]

August 26, 2024

These are my notes for UMD's MATH411: Computer Systems Architecture. These notes are taken live in class ("live-TeX"-ed). This course is taught by Professor Ilchul Yoon, whose notes are inspired by *Computer Architecture: a Quantitative Approach* by Hennessy and Patterson.

Contents

---

[*]Email: jzhang72@terpmail.umd.edu

§1 Computer Architecture Landscape Changes

Here are some of the following things we will cover in the course:

- How processors exploit instruction/thread/data parallelism

- How processors/memory work

- A great deal of jargon in the system area

- How computer architecture affects programming style

- How programming style affects computer architecture

§2 Intro to Set Architecture