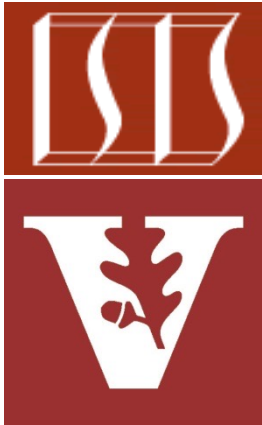


# **CS 253: Parallel Functional Programming with Java & Android: Overview (Part 4)**

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**Professor of Computer Science**

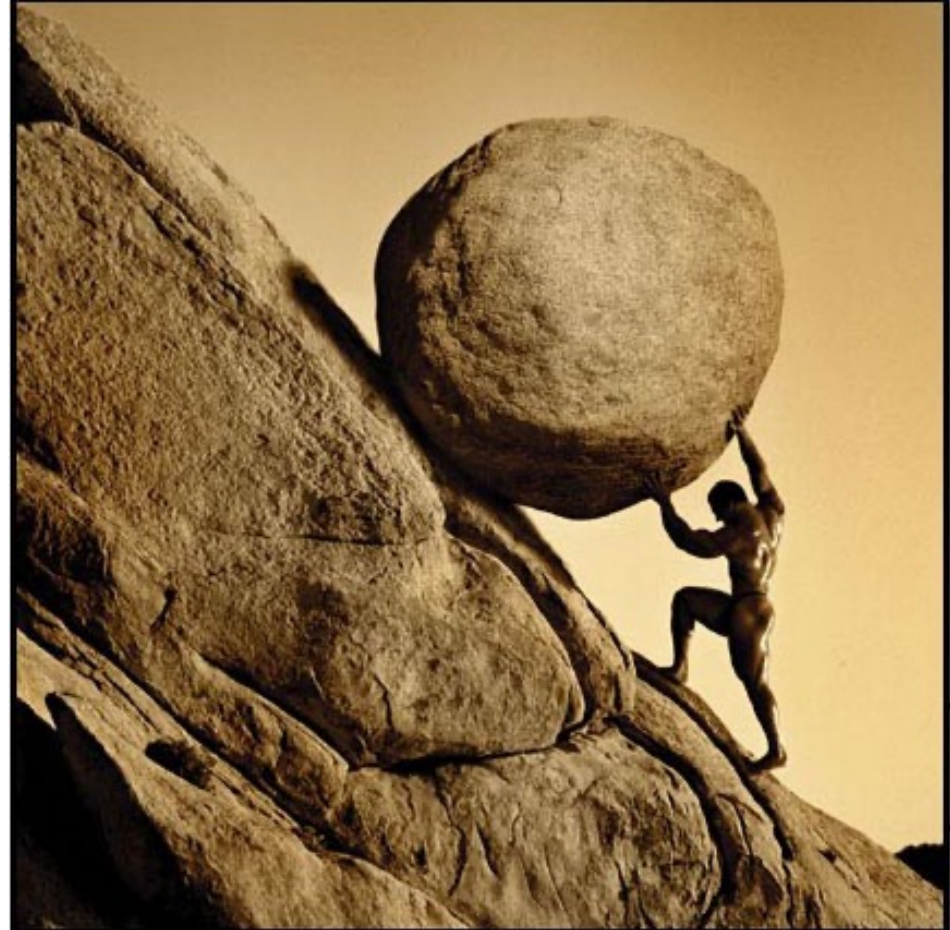
**Institute for Software  
Integrated Systems**

**Vanderbilt University  
Nashville, Tennessee, USA**



# Learning Objectives in this Lesson

- Understand the course topics & logistics
  - Course philosophy
  - Course contents
  - Structure of the lecture material
  - Overview of the assignments & assessments
  - Setting up the Java & Android IDE on Android Studio
  - Setting up GitLab et al.
  - Accessing Android & Java source code
- Summary

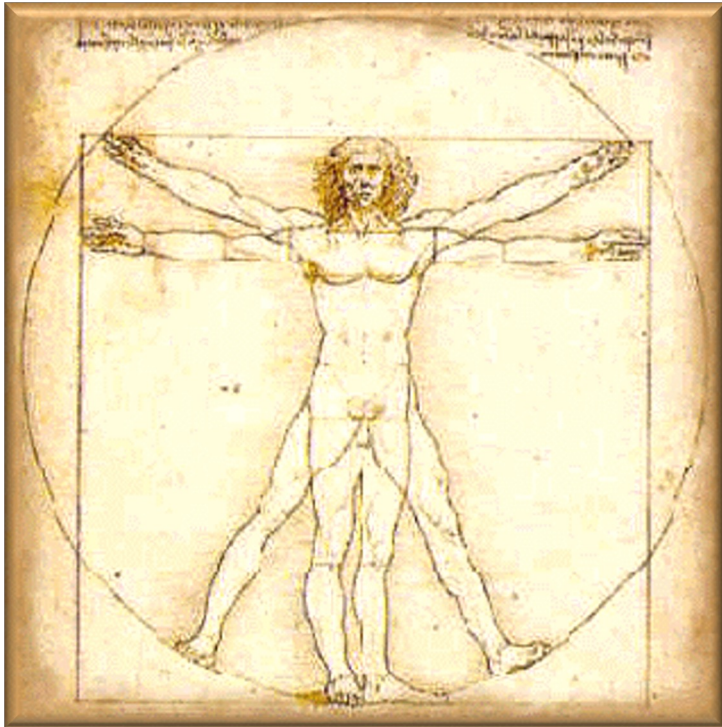


# Summary



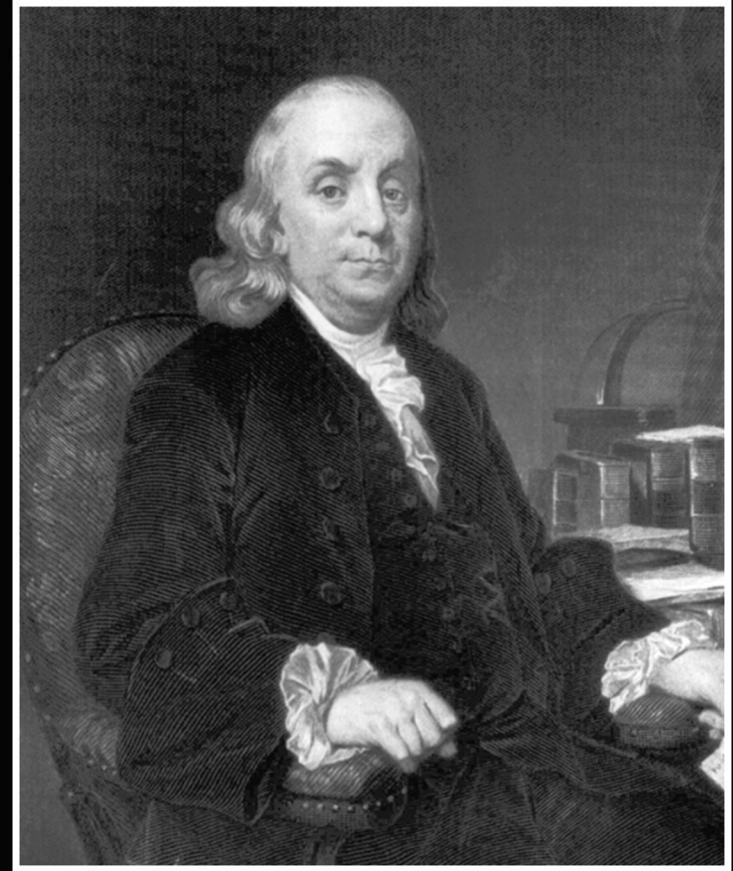
# Summary

- You will get out of this course what you put into it



# Summary

- You will get out of this course what you put into it
- Be prepared to work hard



## HARD WORK

“Human Felicity is produc'd not so much by great Pieces of good Fortune that seldom happen, as by little Advantages that occur every Day” - Benjamin Franklin

# Summary

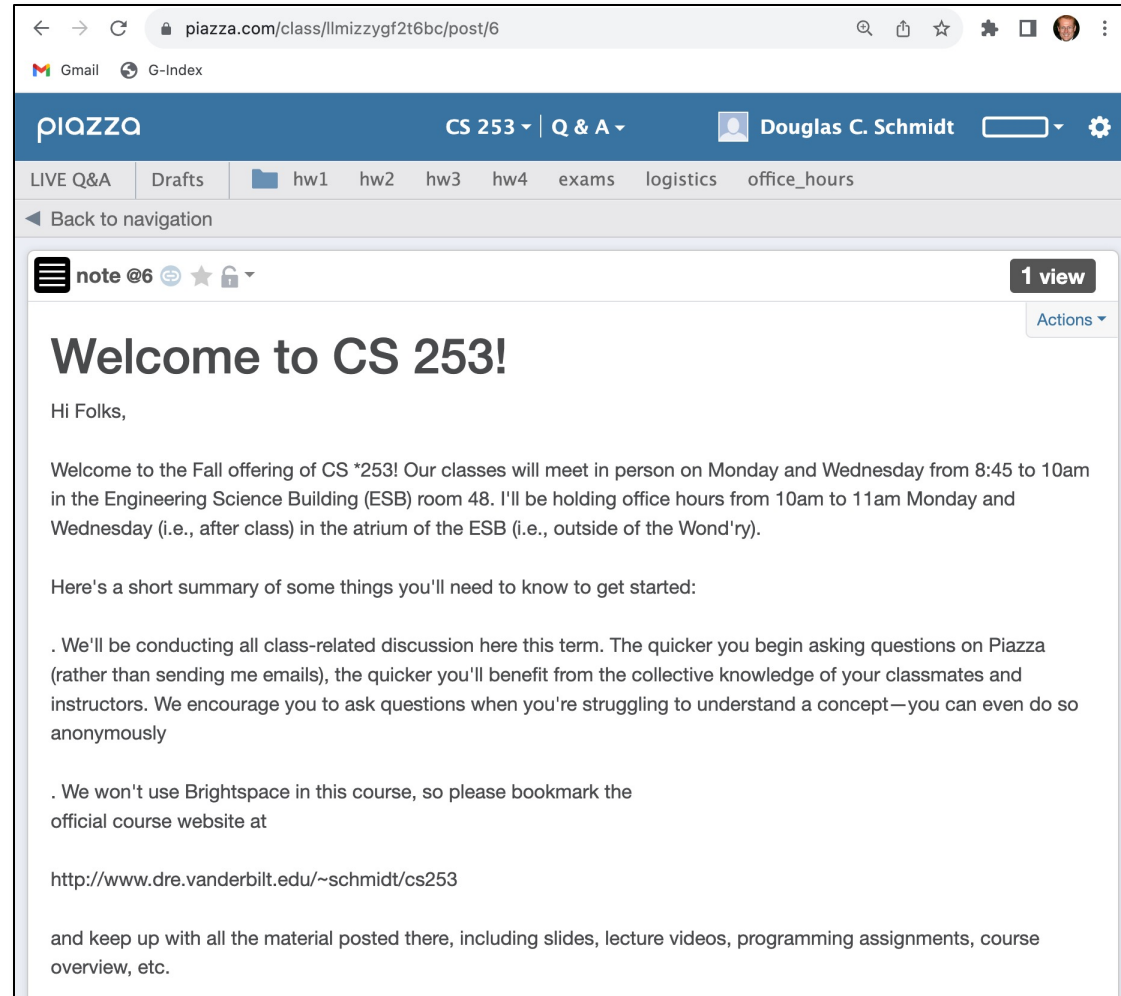
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- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...



# Summary

- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
- Participate in discussions in class & on piazza



The screenshot shows a web browser displaying a Piazza post. The browser address bar shows the URL: piazza.com/class/llmizzygf2t6bc/post/6. The Piazza interface includes a header with the course name 'CS 253' and the user 'Douglas C. Schmidt'. Below the header is a navigation menu with options like 'LIVE Q&A', 'Drafts', and various homework assignments (hw1-hw4). The main content of the post is a welcome message for the Fall offering of CS 253, detailing class meeting times and locations, and providing a link to the official course website.

note @6 1 view

## Welcome to CS 253!

Hi Folks,

Welcome to the Fall offering of CS \*253! Our classes will meet in person on Monday and Wednesday from 8:45 to 10am in the Engineering Science Building (ESB) room 48. I'll be holding office hours from 10am to 11am Monday and Wednesday (i.e., after class) in the atrium of the ESB (i.e., outside of the Wond'ry).

Here's a short summary of some things you'll need to know to get started:

- . We'll be conducting all class-related discussion here this term. The quicker you begin asking questions on Piazza (rather than sending me emails), the quicker you'll benefit from the collective knowledge of your classmates and instructors. We encourage you to ask questions when you're struggling to understand a concept—you can even do so anonymously
- . We won't use Brightspace in this course, so please bookmark the official course website at

<http://www.dre.vanderbilt.edu/~schmidt/cs253>

and keep up with all the material posted there, including slides, lecture videos, programming assignments, course overview, etc.

See [piazza.com/vanderbilt/fall2023/cs253](https://piazza.com/vanderbilt/fall2023/cs253)

# Summary

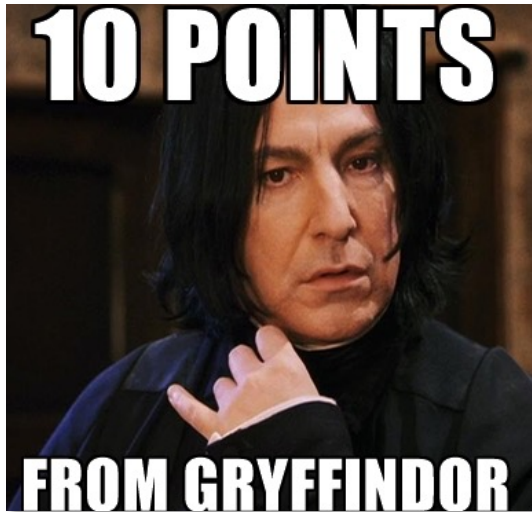
- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
- Participate in discussions in class & on piazza
  - Please get in the habit of checking piazza frequently!





# Summary

- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
  - Participate in discussions in class & on piazza
- **No laptops/phones in class unless explicitly allowed**

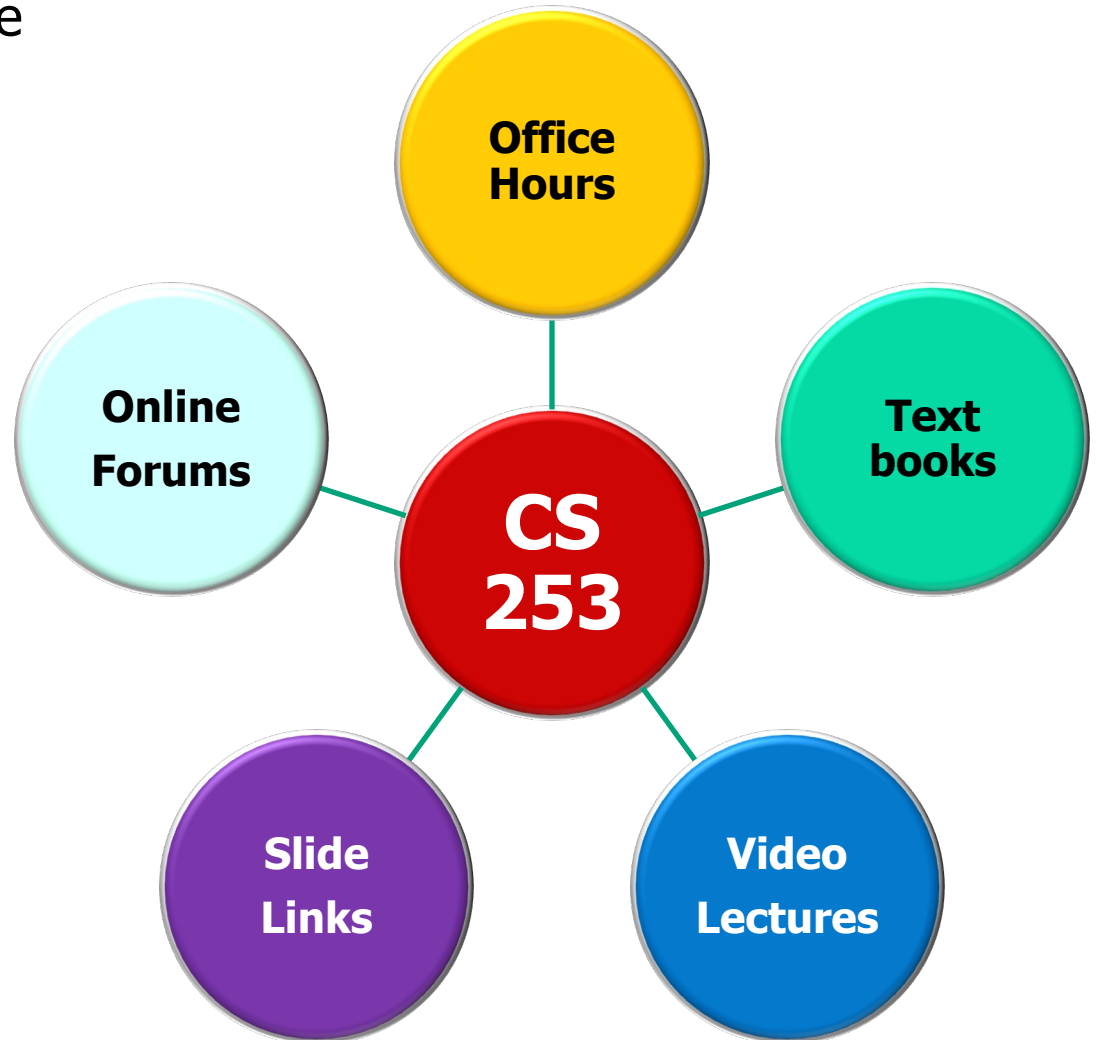


Failure to comply with this rule will cost you participation points..

# Summary

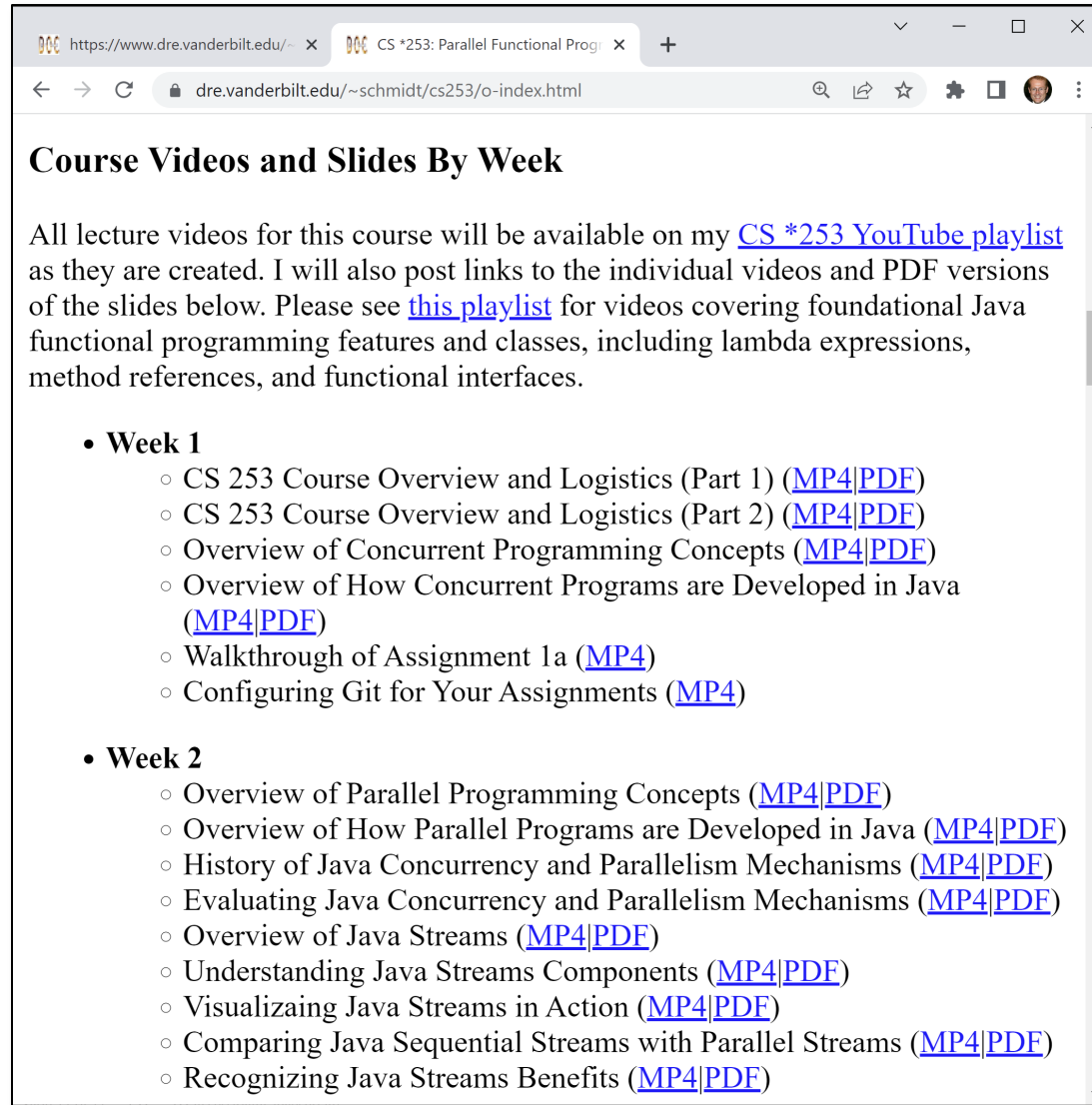
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- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
  - Participate in discussions in class & on piazza
  - No laptops/phones in class unless explicitly allowed
- Avail yourself of available resources



# Summary

- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
  - Participate in discussions in class & on piazza
  - No laptops/phones in class unless explicitly allowed
- Avail yourself of available resources
  - My website contains a lot of useful information!



https://www.dre.vanderbilt.edu/~schmidt/cs253/o-index.html

## Course Videos and Slides By Week

All lecture videos for this course will be available on my [CS \\*253 YouTube playlist](#) as they are created. I will also post links to the individual videos and PDF versions of the slides below. Please see [this playlist](#) for videos covering foundational Java functional programming features and classes, including lambda expressions, method references, and functional interfaces.

- **Week 1**
  - CS 253 Course Overview and Logistics (Part 1) ([MP4](#)|[PDF](#))
  - CS 253 Course Overview and Logistics (Part 2) ([MP4](#)|[PDF](#))
  - Overview of Concurrent Programming Concepts ([MP4](#)|[PDF](#))
  - Overview of How Concurrent Programs are Developed in Java ([MP4](#)|[PDF](#))
  - Walkthrough of Assignment 1a ([MP4](#))
  - Configuring Git for Your Assignments ([MP4](#))
- **Week 2**
  - Overview of Parallel Programming Concepts ([MP4](#)|[PDF](#))
  - Overview of How Parallel Programs are Developed in Java ([MP4](#)|[PDF](#))
  - History of Java Concurrency and Parallelism Mechanisms ([MP4](#)|[PDF](#))
  - Evaluating Java Concurrency and Parallelism Mechanisms ([MP4](#)|[PDF](#))
  - Overview of Java Streams ([MP4](#)|[PDF](#))
  - Understanding Java Streams Components ([MP4](#)|[PDF](#))
  - Visualizaing Java Streams in Action ([MP4](#)|[PDF](#))
  - Comparing Java Sequential Streams with Parallel Streams ([MP4](#)|[PDF](#))
  - Recognizing Java Streams Benefits ([MP4](#)|[PDF](#))

See [www.dre.vanderbilt.edu/~schmidt/cs253](https://www.dre.vanderbilt.edu/~schmidt/cs253)

# Summary

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- You will get out of this course what you put into it
  - Be prepared to work hard
  - Do *not* miss deadlines...
  - Participate in discussions in class & on piazza
  - No laptops/phones in class unless explicitly allowed
- Avail yourself of available resources



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Please resist the urge to email me (you can use private piazza posts if it's a confidential matter or you'd like to schedule a meeting)!

# Summary

- There are abundant opportunities!



FIGURE 1: AVERAGE SALARIES BY DISCIPLINE / BACHELOR'S DEGREES

BROAD CATEGORY	2023 SALARY PROJECTION	2022 SALARY PROJECTION	% CHANGE
Engineering	\$74,405	\$73,922	0.7%
Computer Sciences	\$72,843	\$75,900	-4.0%
Math & Sciences	\$67,199	\$66,760	0.7%
Business	\$62,069	\$60,695	2.3%
Social Sciences	\$60,107	\$61,173	-1.7%
Agriculture & Natural Resources	\$59,282	\$57,807	2.6%
Communications	\$58,097	\$55,455	4.8%
Humanities	\$52,938	\$50,681	4.5%

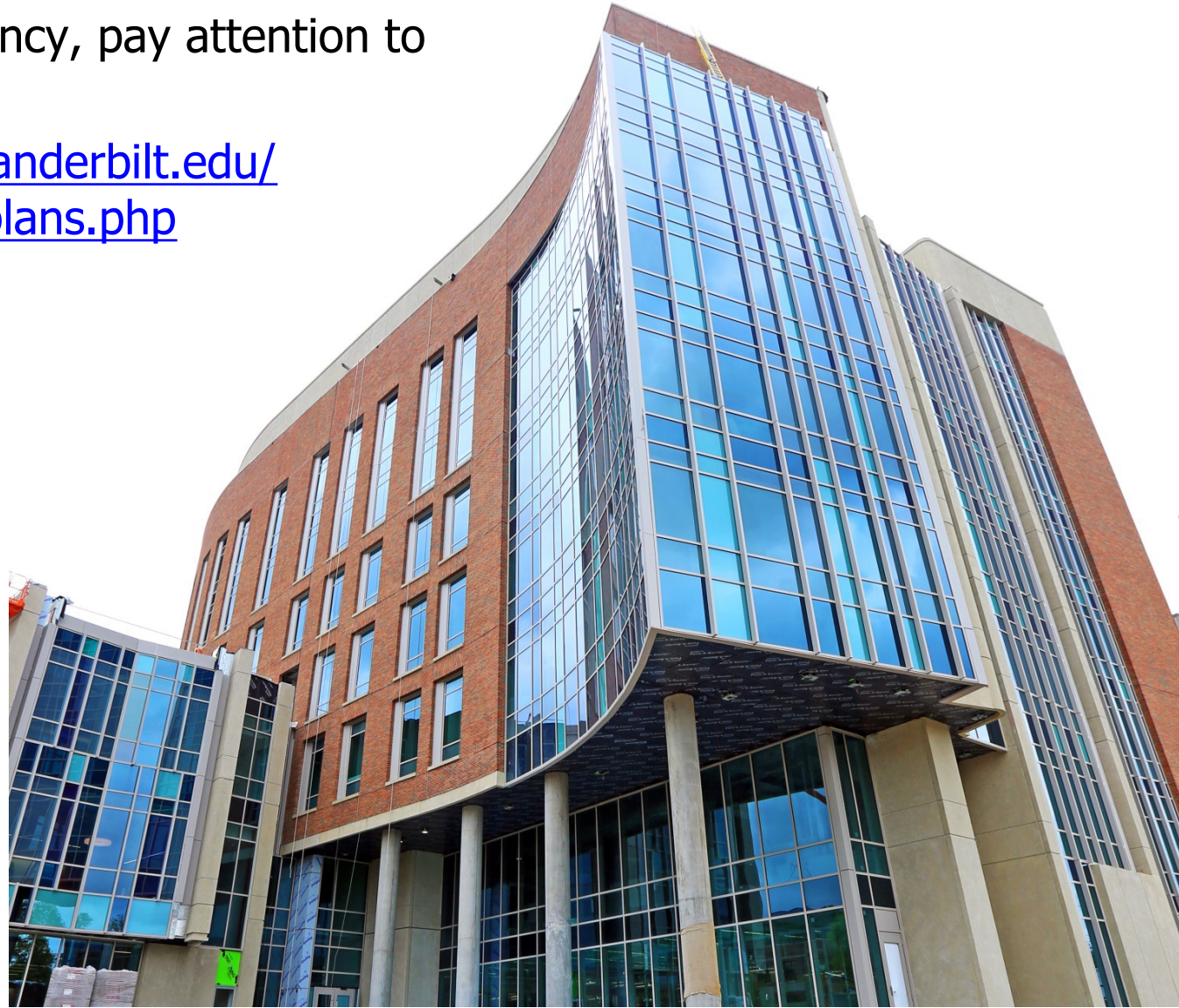
Source: NACE Winter 2023 Salary Survey

See <https://www.naceweb.org/job-market/compensation/salary-for-class-of-2023-computer-sciences-grads-expected-to-fall-but-demand-remains-strong>

# Summary

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- If there's an emergency, pay attention to the escape route!
- See [engineering.vanderbilt.edu/about/evacuationplans.php](http://engineering.vanderbilt.edu/about/evacuationplans.php)



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