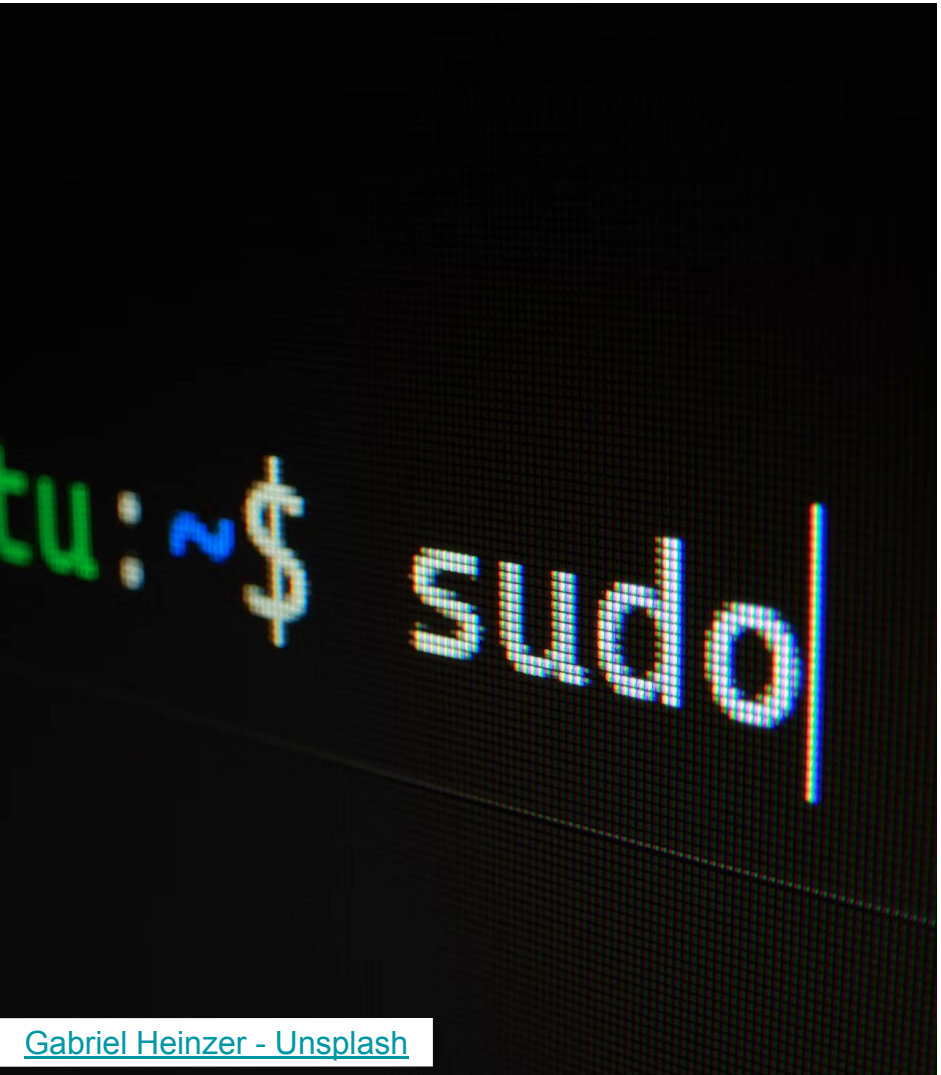


Gabriel Heinzer - Unsplash

CIS 241

System-level Programming and Utilities

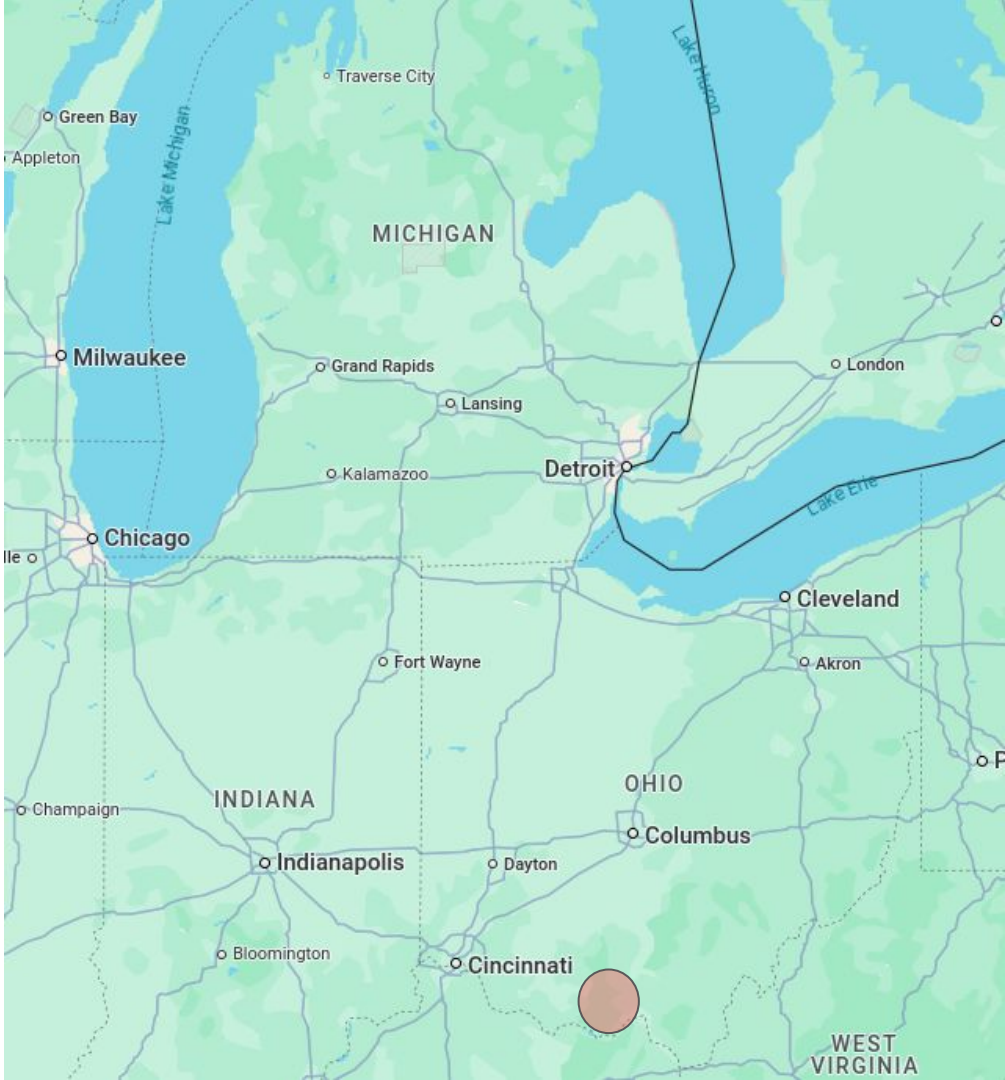
Welcome! :^)

Instructor: Dr. Austin Ferguson
Pronouns: he/him
Email: ferguaus@gvsu.edu
Office: MAK D-2-106

Adapted from materials from Dr. Carrier

Who am I?

Who am I?


Traverse City
Green Bay
Appleton
Lake Michigan
Lake Huron
MICHIGAN
Milwaukee
Grand Rapids
London
Lansing
Detroit
Kalamazoo
Lake Erie
Chicago
Cleveland
Fort Wayne
Akron
INDIANA
OHIO
Champaign
Columbus
Indianapolis
Dayton
Bloomington
Cincinnati
WEST VIRGINIA

Who am I?

Undergrad: Shawnee State Univ.
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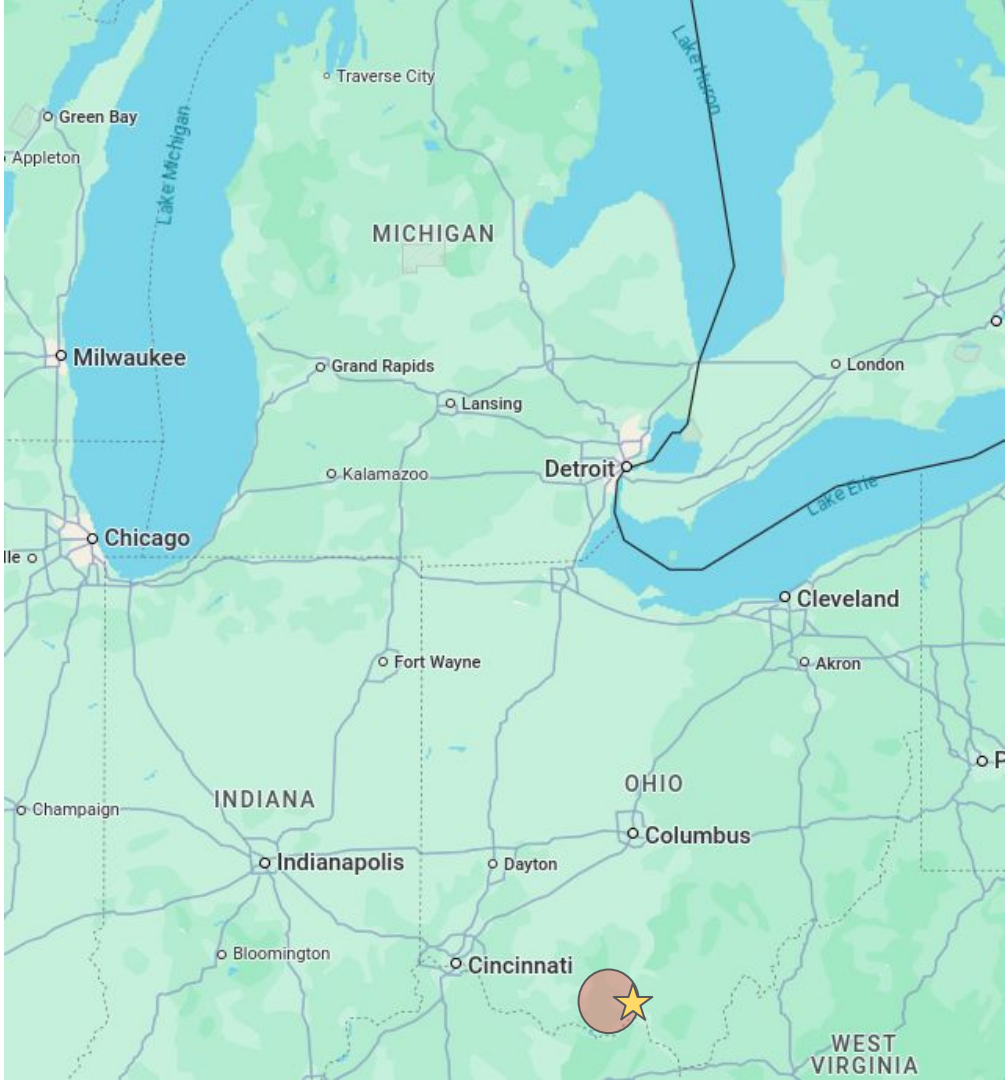

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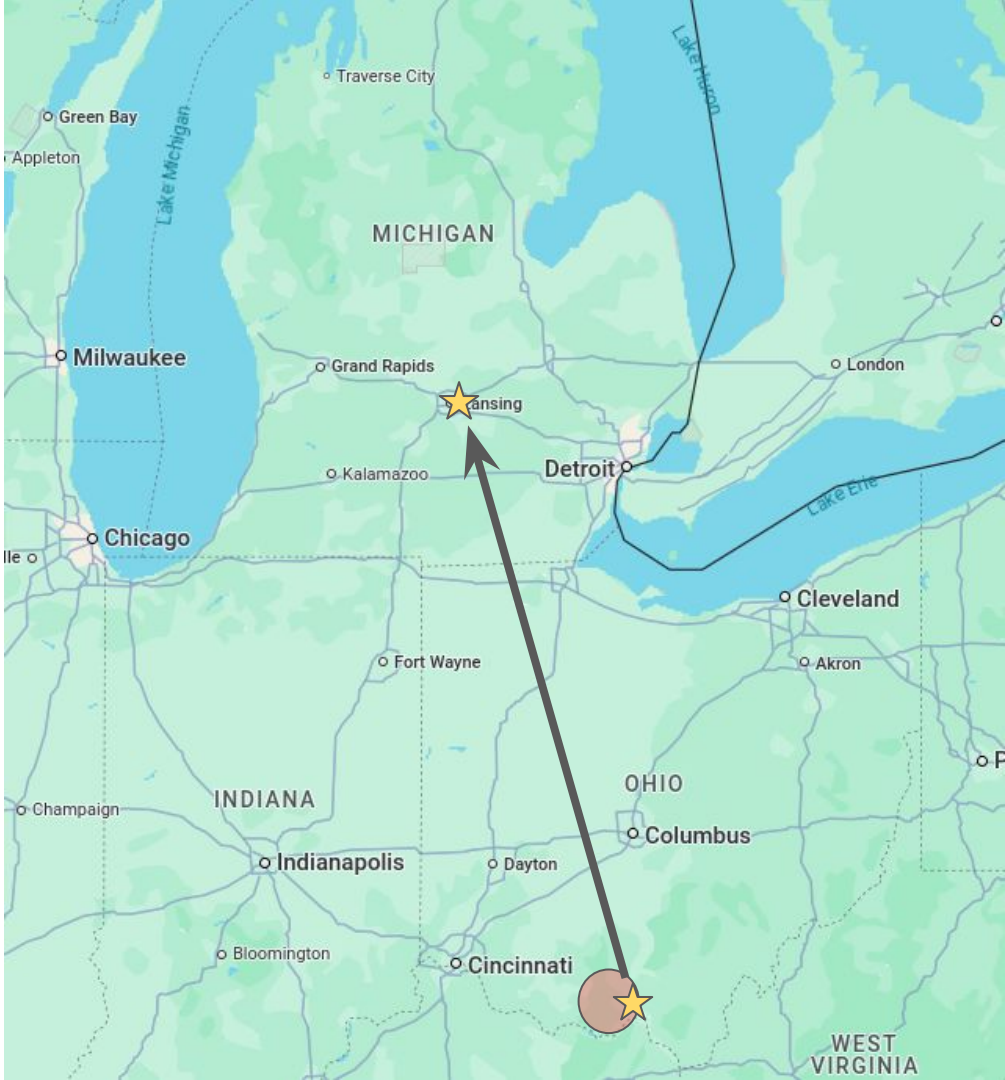

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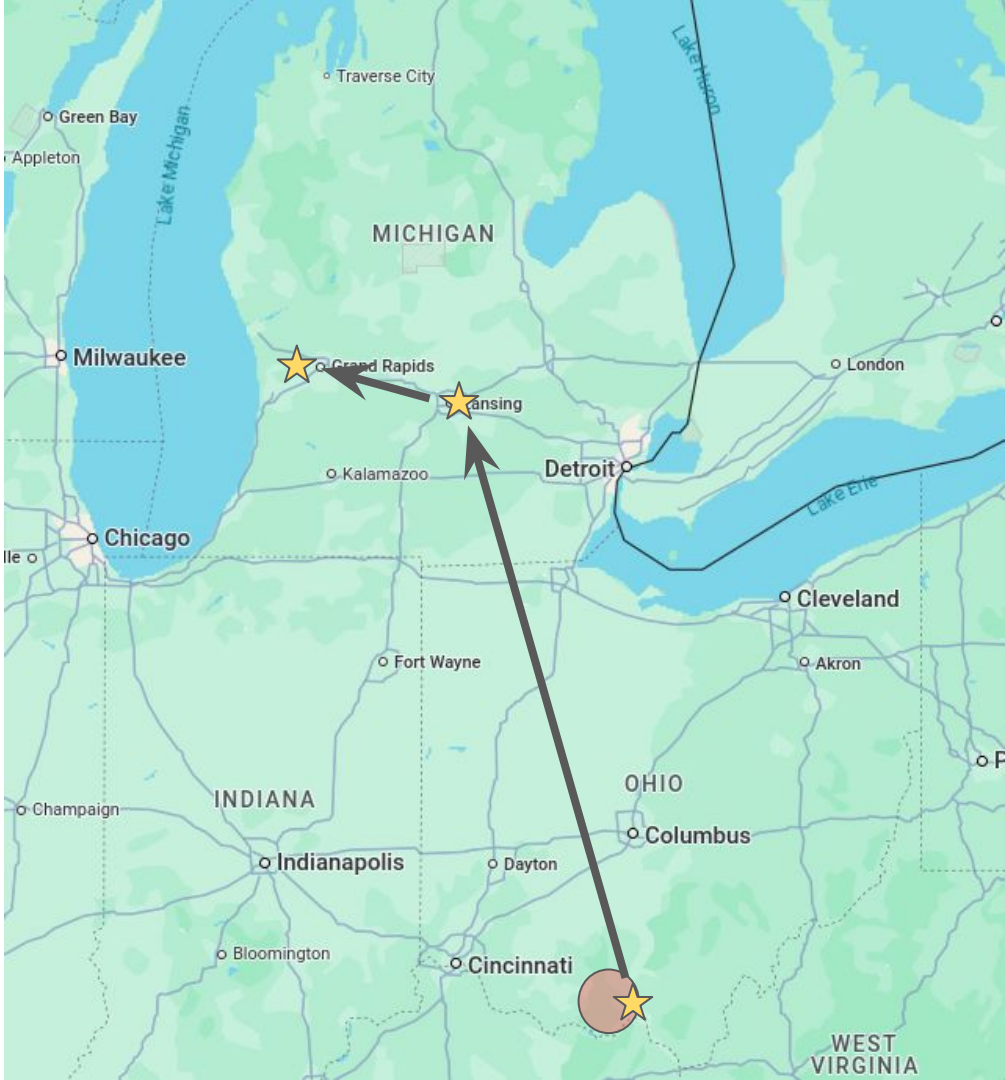

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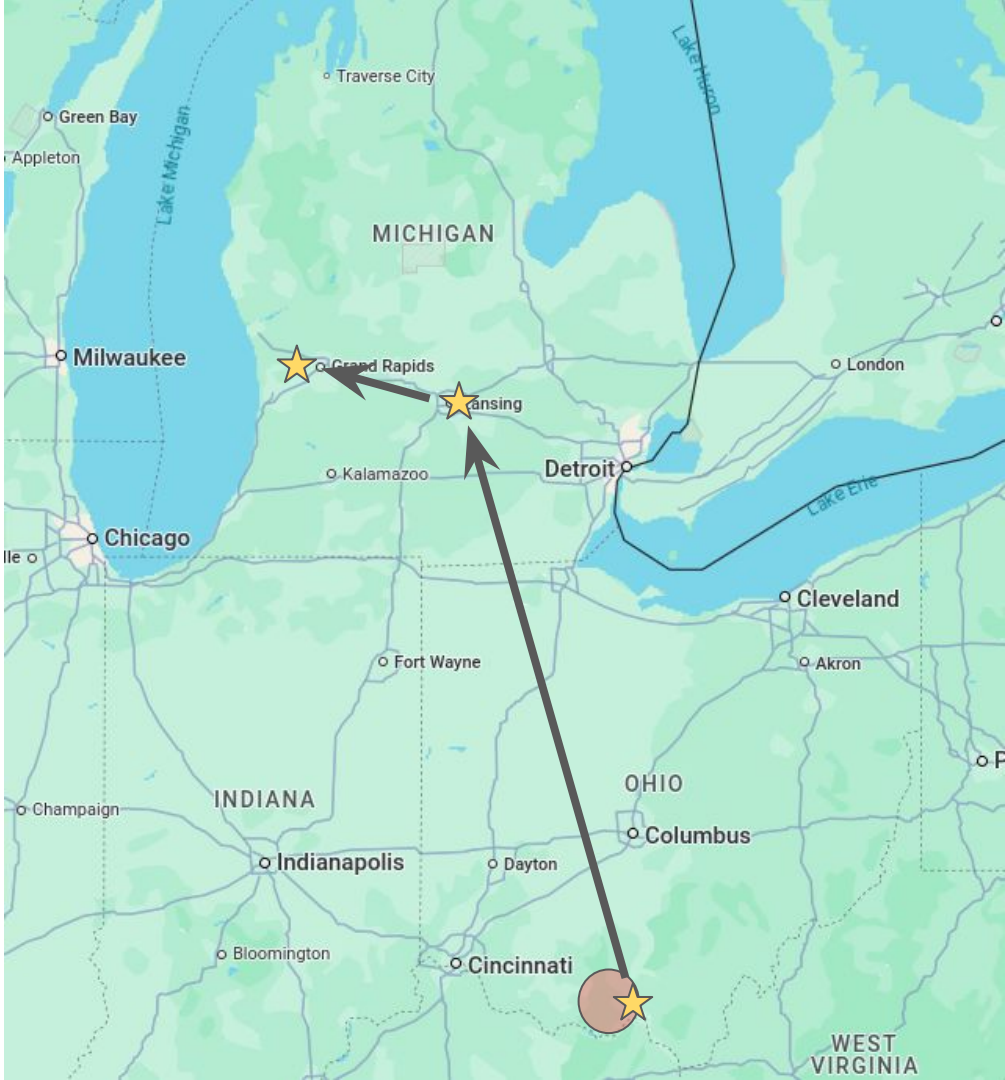


My research

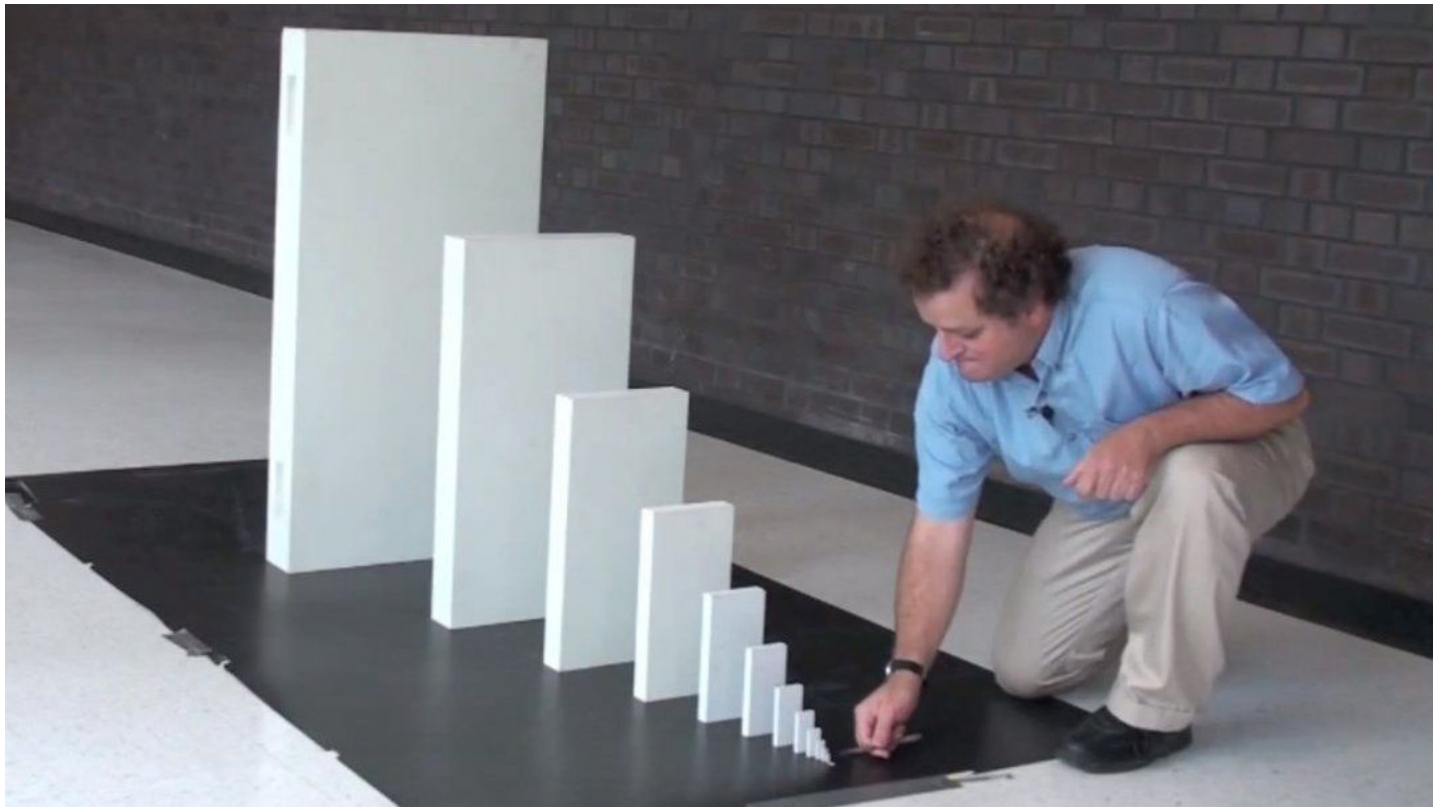
My research (10k-foot view)

My research (10k-foot view)

I use computational models…

… to study evolutionary biology theory

Historical contingency in evolution



Course logistics!

Course logistics

Blackboard ULTRA

Course logistics

- Grades
- Links to other platforms

Course logistics

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PrairieLearn

- Assignments

Course logistics

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- Later in course
- Version control

Course logistics

Blackboard ULTRA

- Grades
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PrairieLearn

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???

- Communication

GitHub

- Later in course
- Version control

Course logistics

Blackboard ULTRA

- Grades
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PrairieLearn

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piazza

Blackboard ULTRA

Discord

- Later in course
- Version control

Contact info!

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Use communication platform!

Or email if private

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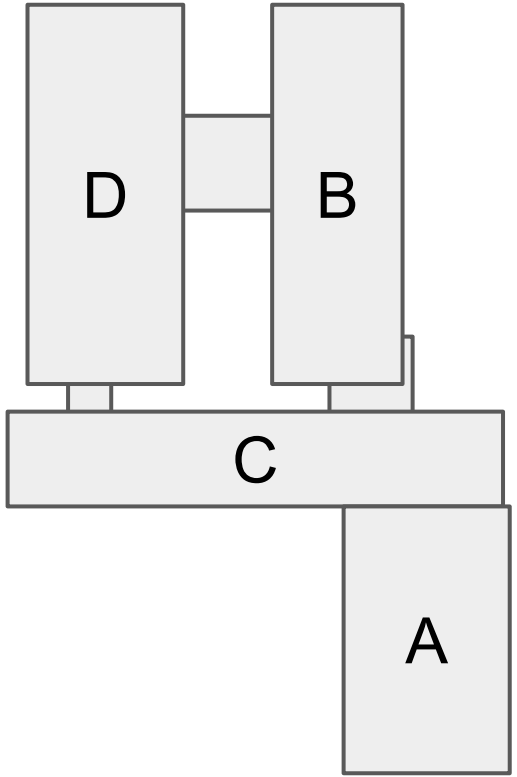
“Office” hours*:



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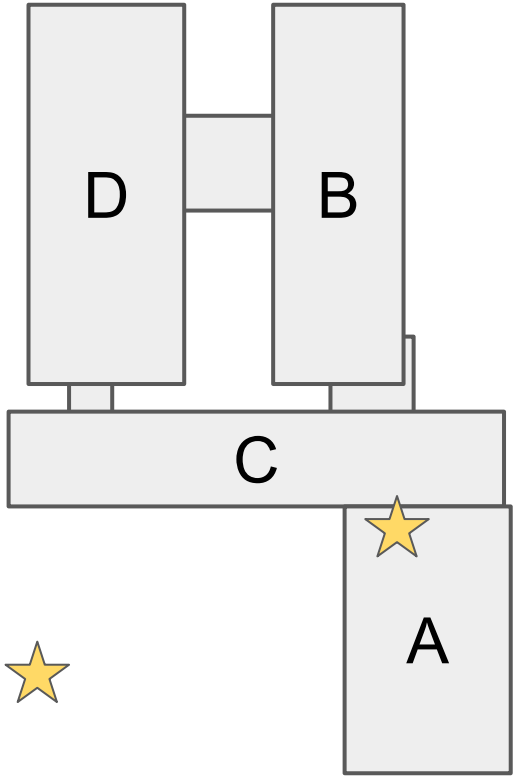

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- Student Success Center (MAK A-1-101)
  - Mon. 10-11am
  - Wed 2-3pm

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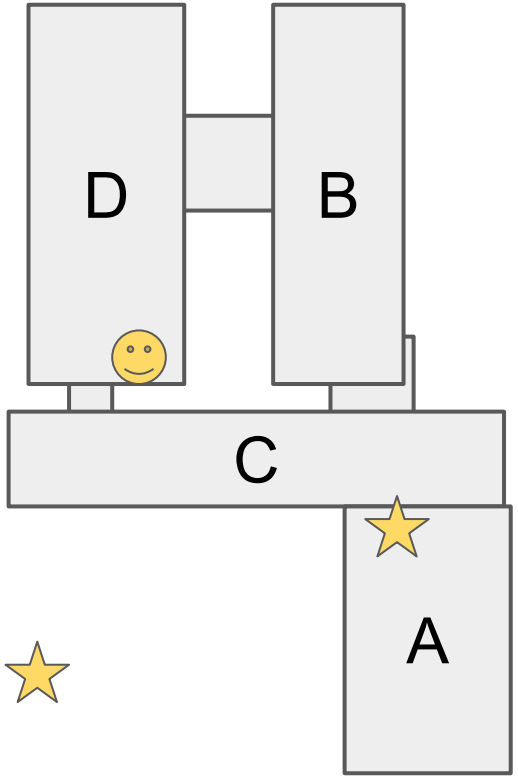

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  - Mon. 10-11am
  - Wed 2-3pm
- My office (MAK-D-2-106)
  - Tues. 4-5pm

Textbooks

None required!

Syllabus has links (**FREE** from GVSU library) for extra reference

Grades 🫣

Grades 🫣

Assignment type	# of assignments	Total % of final grade
Check-in assignments	~ 10	25%
Projects	~ 4	30%
Command line quiz	1	5%
Midterm exam	1	20%
Final	1	20%

Late penalty: 10% per day late, up to 5 days

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Grades 🫣

Wednesday deadlines?

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Project Extensions: 5 free 1-day extensions (together or split) – see syllabus

Link to extension day form (also in syllabus)

https://docs.google.com/forms/d/e/1FAIpQLSccXbtweHG9nyq2CeRV0cym1EgpSCtNQLW7LqfFRYjQI5YyeA/viewform?usp=header

Grades 🫣

A	94%	**C**	74%
A-	90%	**C-**	70%
B+	87%	**D+**	67%
B	84%	**D**	60%
B-	80%	**F**	Below 60%
C+	77%		

Final grade is rounded (ceiling function)
93.05% -> 94%

Other policies

- SAR Accomodations - happy to help, just reach out ASAP!
- Religious observance - let me know beforehand!
- Collaboration
  - Collaboration welcome on check-ins, but all work should be your own
  - Projects should be kept to conceptual questions (do not share code!)

Other policies

- Academic misconduct and plagiarism
  - Don’t do it!
  - I take this stuff seriously
  - All code and text MUST be your own
- Artificial intelligence (AI)
  - I get it can be helpful, but it’s *so* easy to misuse
  - You should not be generating text/code
    - Obfuscating generated code is still misconduct!

Other policies

- Regret clause
  - Within 48 hours of a deadline / exam, you can invoke the regret clause if you think you committed academic misconduct
  - You will receive a zero on the assignment, but not an OSCCR report

When in doubt, just ask! I’m here to help!

Extension / late days are way better than misconduct!!!

A supportive peer community helps with success

Look for Computing-related student organizations!

wic@mail.gvsu.edu

Hackers Analyzing Threats (HAT) - vijay_bhuse@gvsu.edu

Grand Valley Competitive Programming Club (CPC) – woodriir@gvsu.edu

A note on transparency

A note on transparency

- I’m new!

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- I’m new!
- I rely on your feedback

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Thanks in advance! :^)

Grading?

Communication?

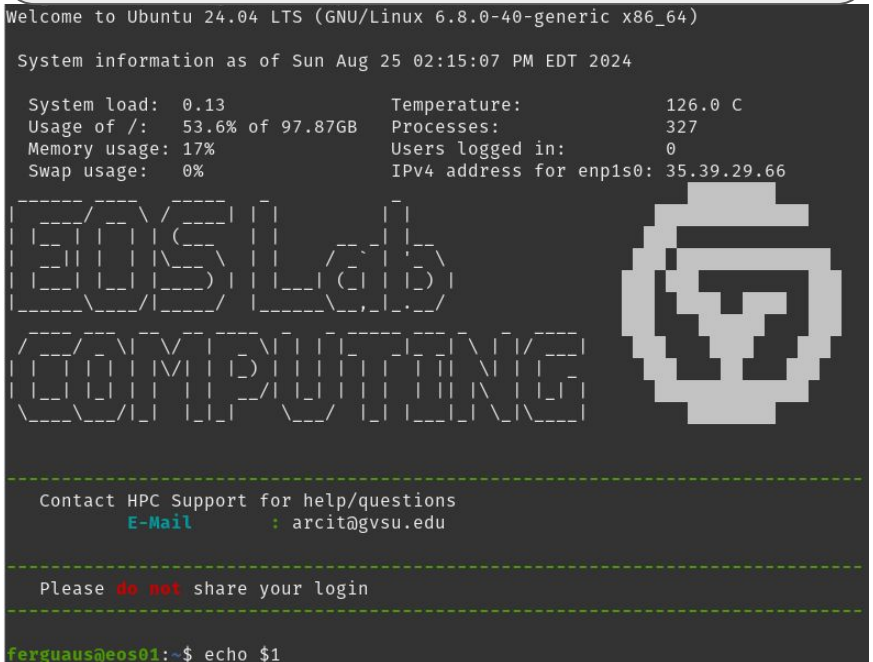
Questions about logistics?

Resources?

Content?

The big picture

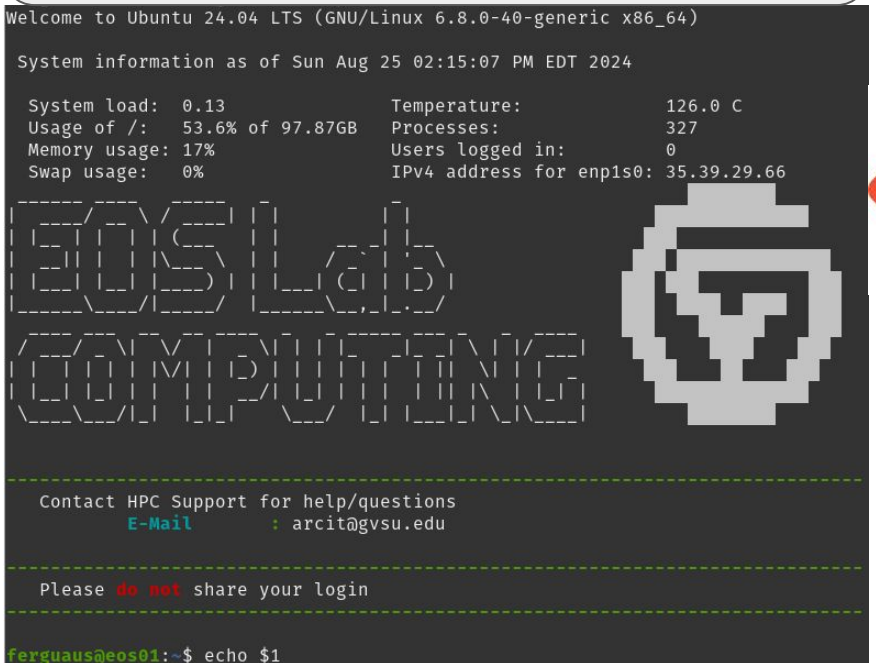
Basic Linux terminal usage



The big picture

Basic Linux terminal usage

git basics
(version control)



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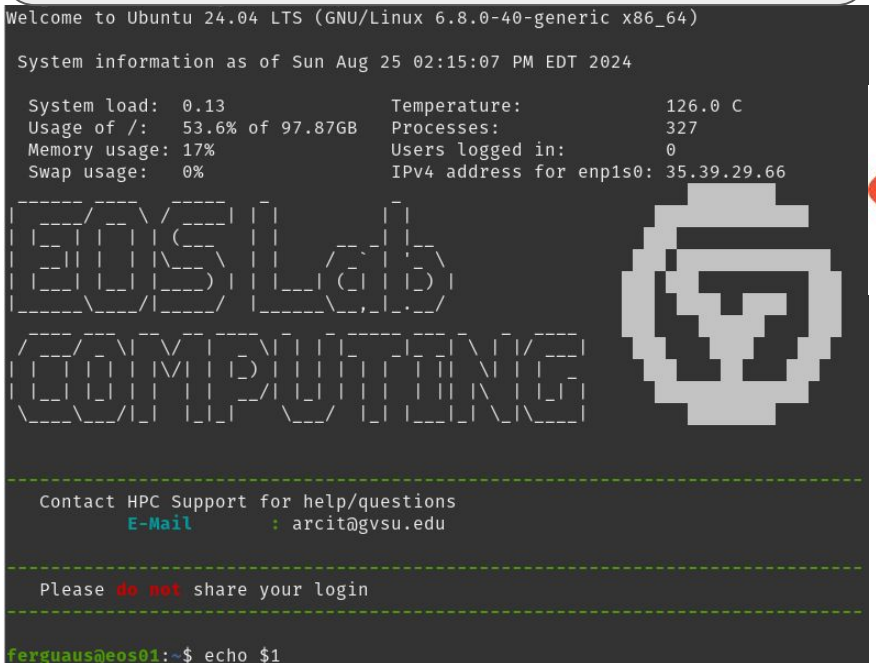
Systems Prog. in C



git

Why should I care? 🤔

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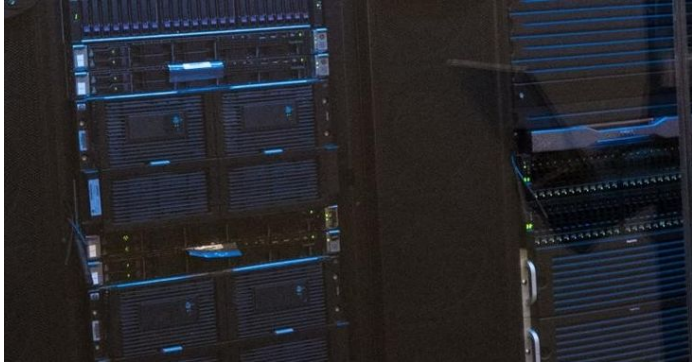

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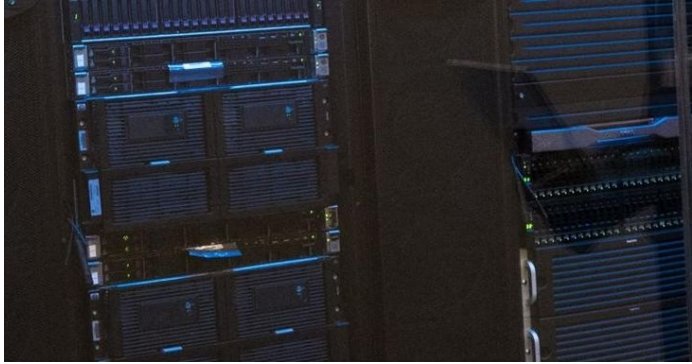

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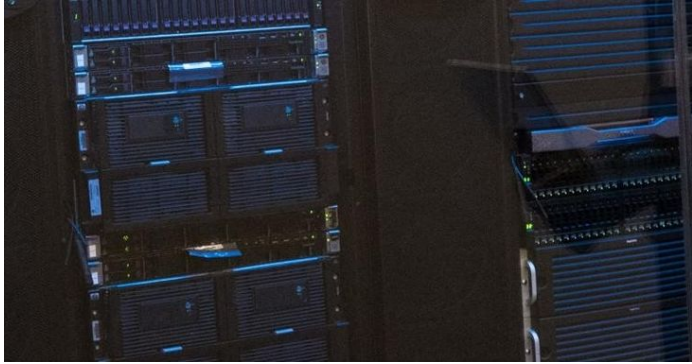

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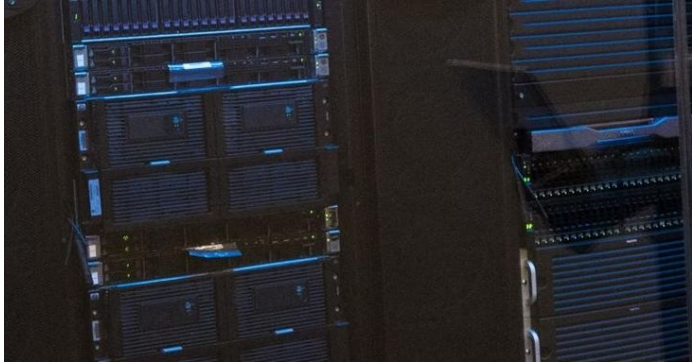

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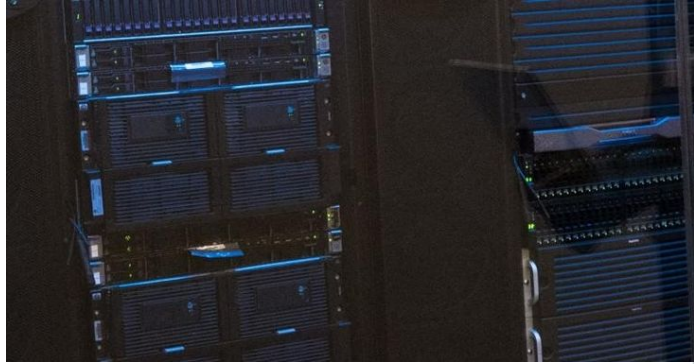

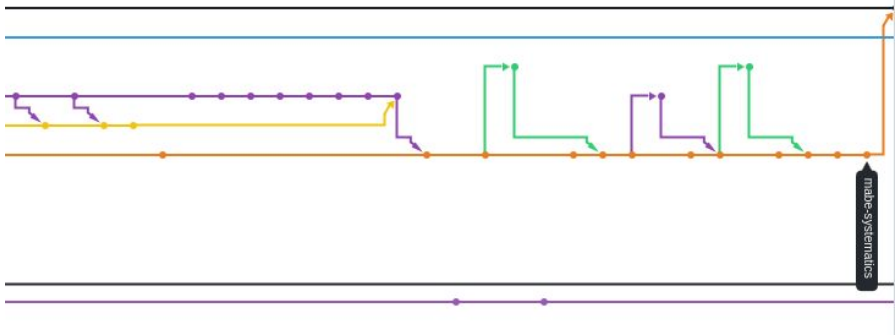

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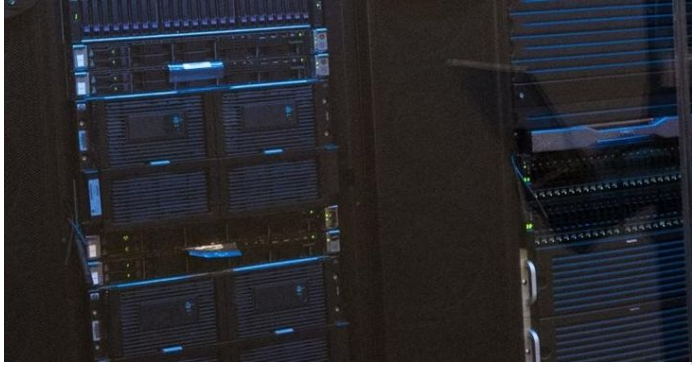

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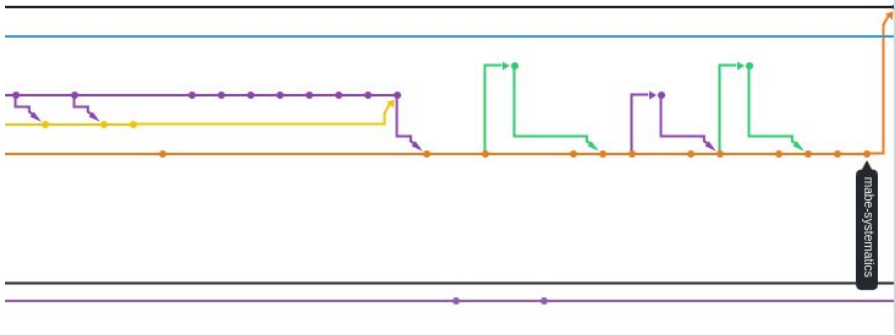

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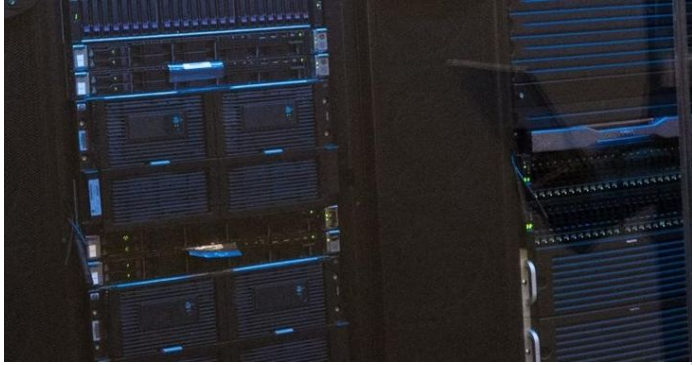

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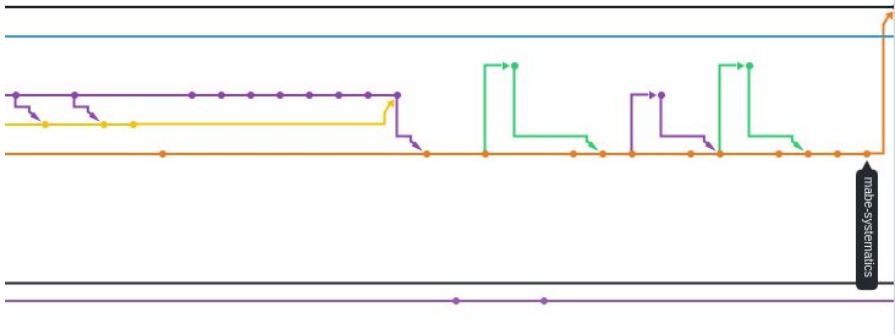

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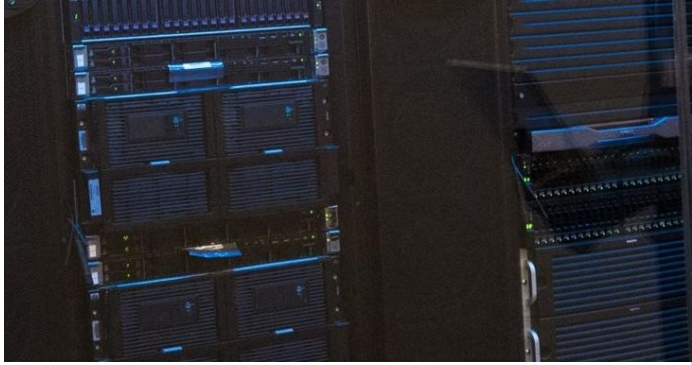

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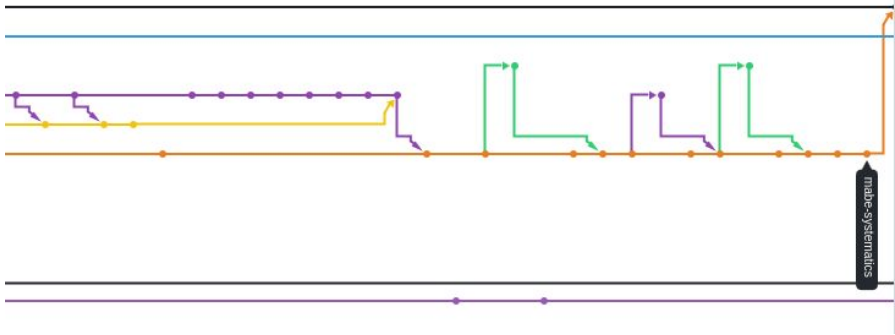

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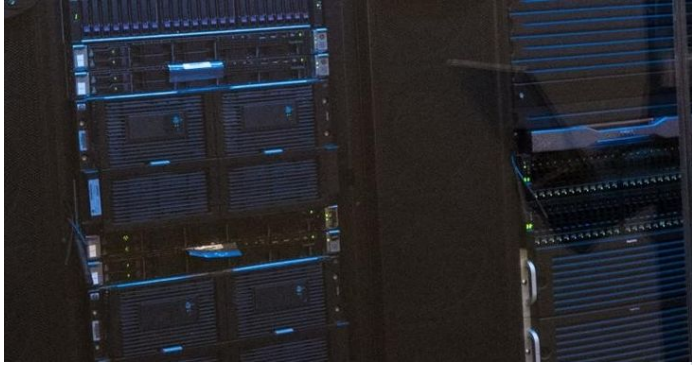

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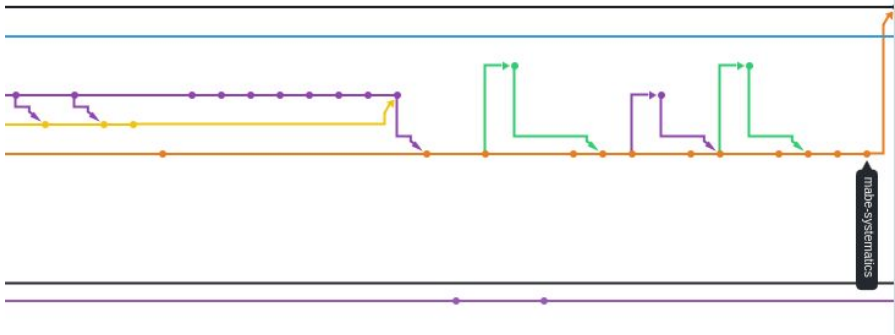

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- Understand the low level (memory management)

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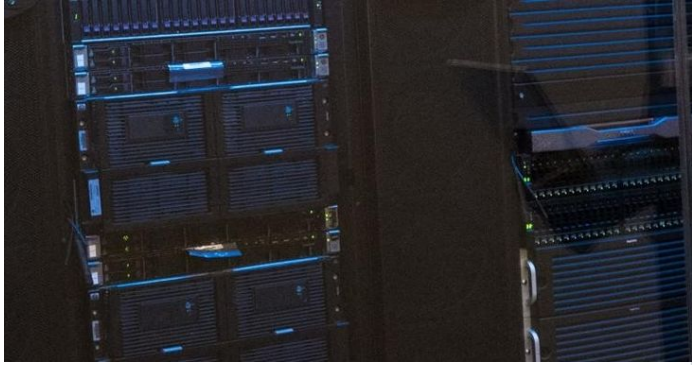

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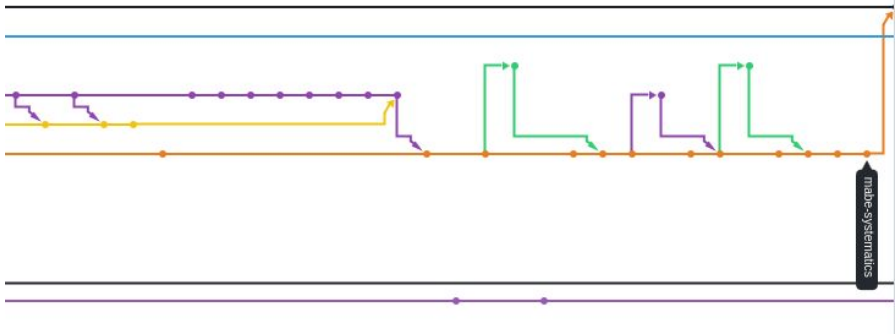

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C:

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- Will improve your high level programming

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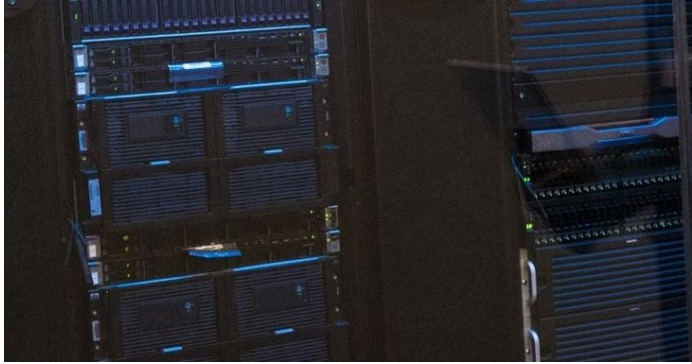

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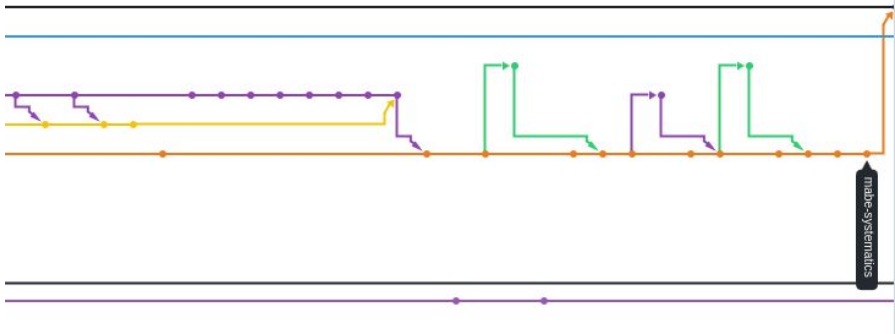

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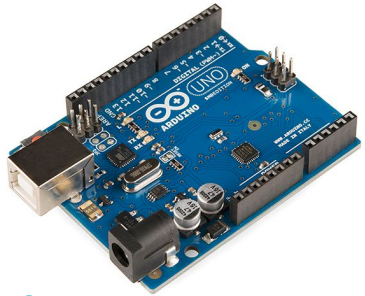
C:

- Understand the low level (memory management)
- Will improve your high level programming
- Still used in embedded systems



SparkFun - (Wikimedia)