ACM Fall 2021

CSIP 4

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Introduction

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Welcome!

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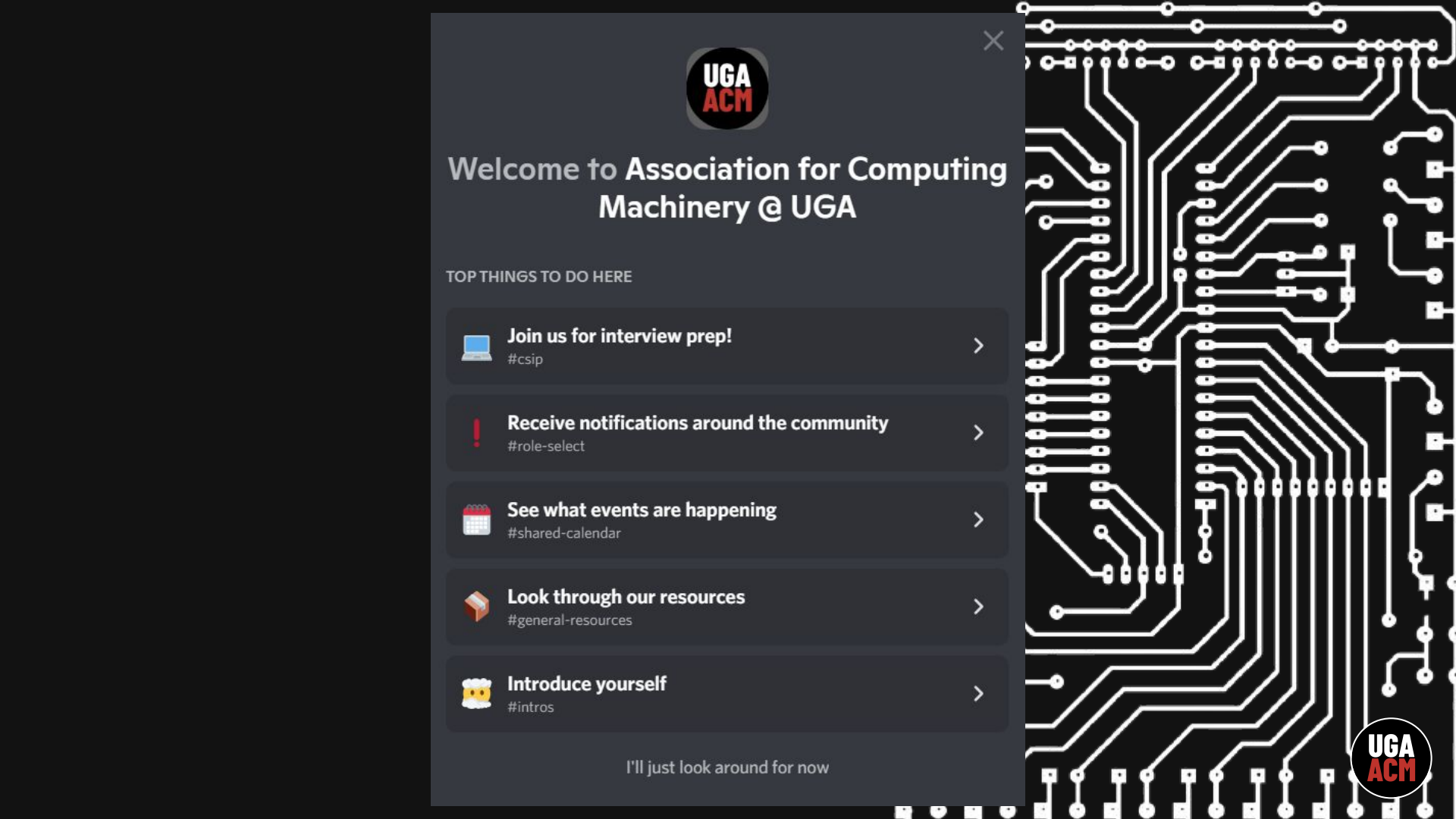
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Welcome to Association for Computing Machinery @ UGA
TOP THINGS TO DO HERE
Join us for interview prep!
#csip
Receive notifications around the community
#role-select
See what events are happening
#shared-calendar
Look through our resources
#general-resources
Introduce yourself
#intros
I'll just look around for now
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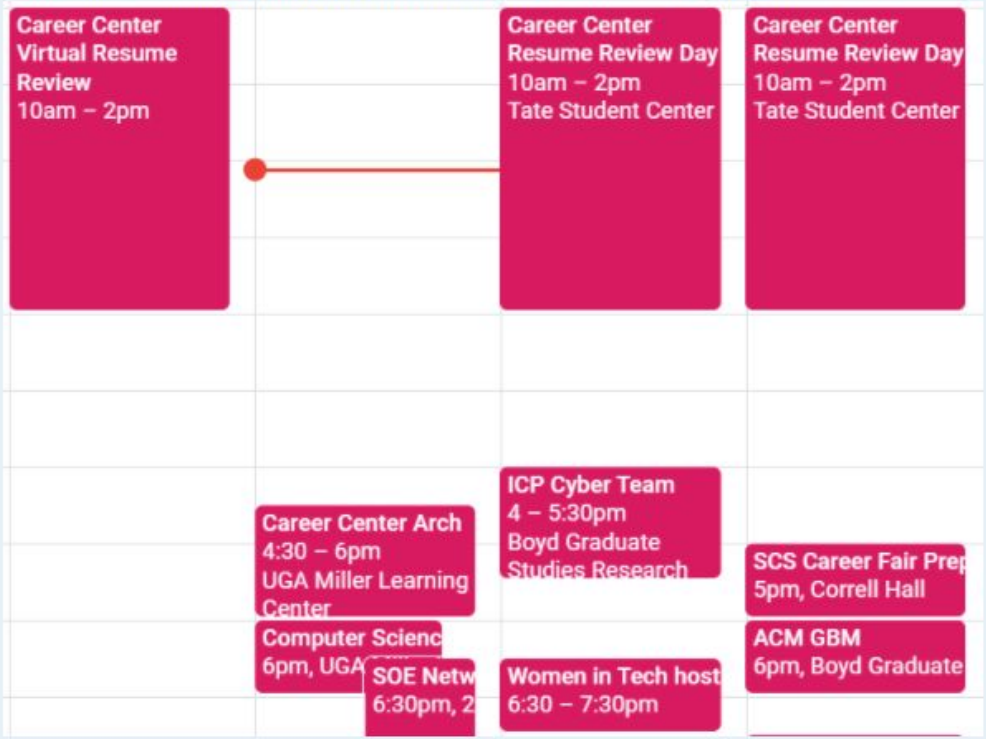
Jeffery John

> Jeffery John
>
> crying, y'all come to ACM meetings we'll have career center reps this week Thursday Boyd 328 @ 6PM

if anyone still feels unprepared I will sob https://discord.gg/pZsm6vb3Bc



Career Fairs

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Engineering & Computer Science

CAREER FAIR CHECKLIST

October 7, Classic Center (IN-PERSON)

- [ ] Update Resume
- [ ] Update Handshake Profile
- [ ] Select Professional Attire
- [ ] Research 5+ Registered Employers
- [ ] Develop & Practice Elevator Pitch

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- GitHub Student Developer Pack
  - education.github.com/pack
  - Interview Cake
  - educative

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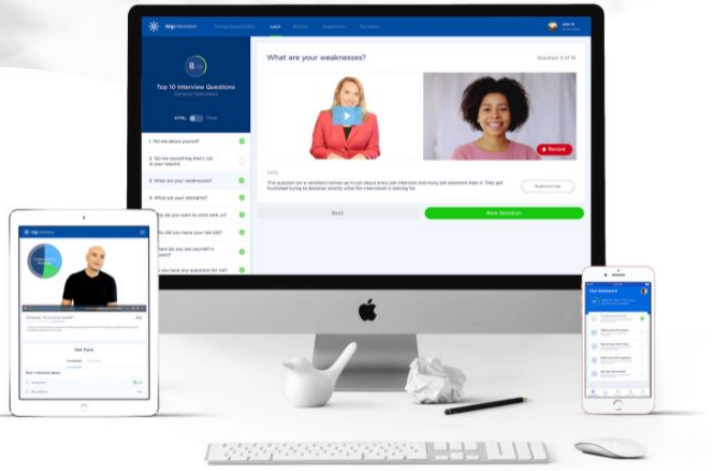
- Career Center
  - Representative: Kenyetta Nesbitt
  - Big Interview
  - Mock Interviews
  - Drop-in hours

UNIVERSITY OF GEORGIA

1785

Use Big Interview to learn and practice your interview skills, whether you're interviewing for a job or graduate school.



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NETWORKING NIGHT

TUESDAY, Sept. 28th
6:30-7:45 PM
Studio 225

Free light snacks and refreshments provided!

FREE professional headshots and resume critique tables

Network with peers!

SOE

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Mental health resources

Getting Started

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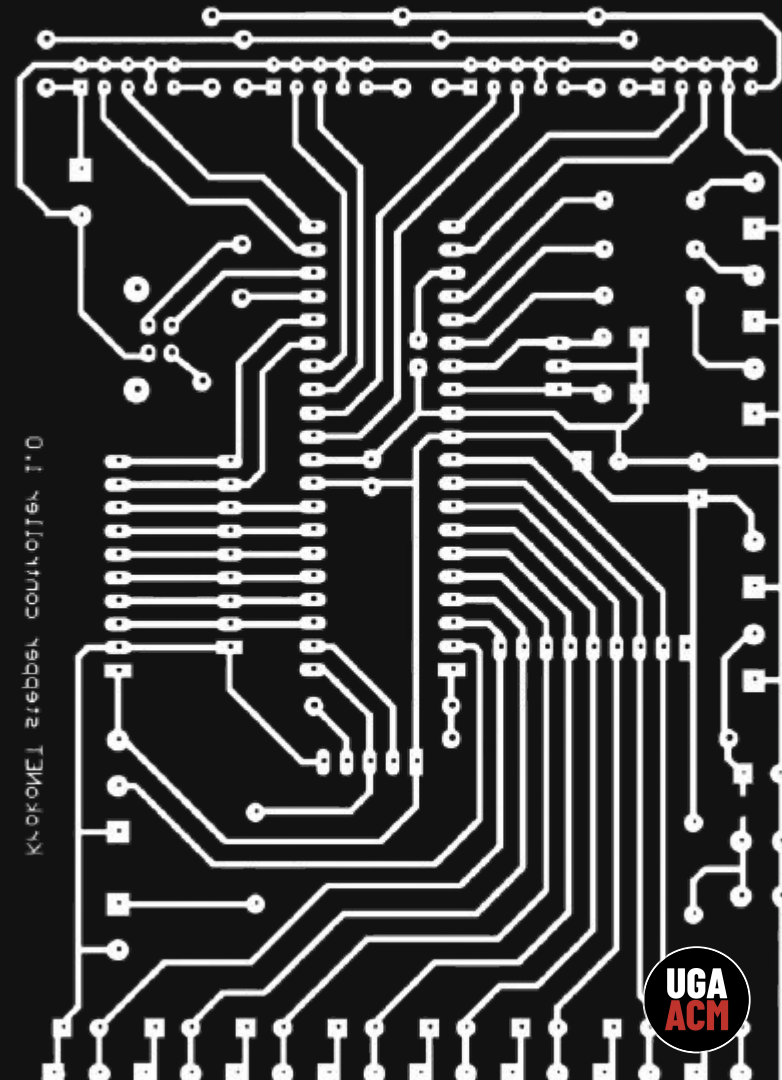
HackerRank



Data Structures

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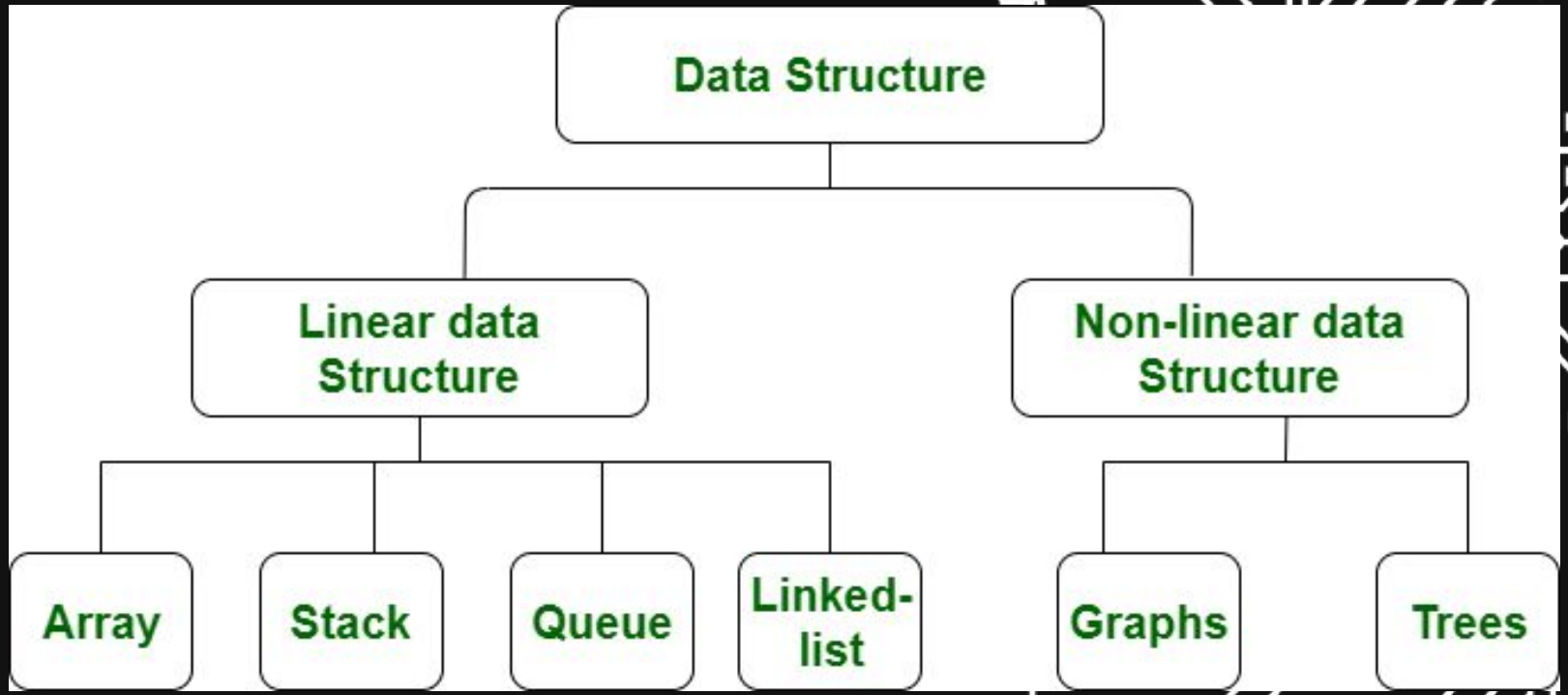
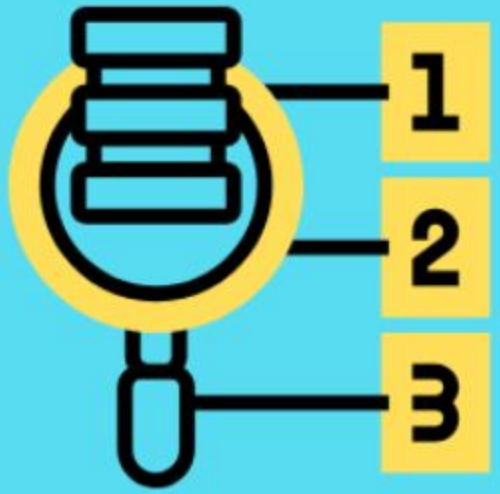

Data Structure
Linear data Structure
Non-linear data Structure
Array
Stack
Queue
Linked-list
Graphs
Trees



1.) ARRAYS

Arrays are bins of consecutive memory to hold data of the type specified when you create the array.

Assignment: Array[0] = "data for slot 0" O(1)
Retrieval: mString = Array[0] O(1)

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2.) HASH TABLES

A Hash table is a data type made from an array to be able to store and retrieve data in constant runtime or O(1), based on a hash of the key which maps to the array index.

Assignment: mHashTable["key"] = "value"

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3.) LINKED LIST

A data structure comprised of Nodes that store data and point to the next node. Inserts in O(1) constant time, searches in O(N). Uses dynamic amounts of memory without needing to resize.

mLinkedList.append("MyData")

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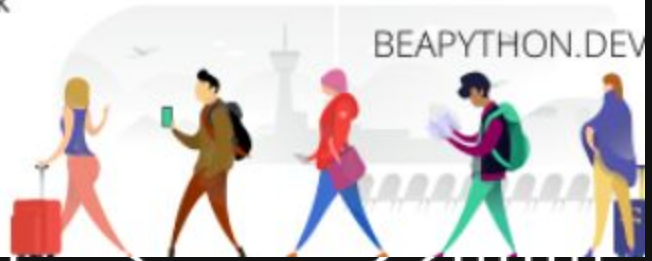
4.) QUEUES AND STACKS

Queues are a first in first out data, FIFO, structure similar to a line. The oldest element is retrieved by calling dequeue()

Stacks are last in first out (LIFO) and are similar to a stack of magazines. Only the top element can be retrieved by "popping" data using the pop() method.

Both can be implemented with an array or a list



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5.) GRAPHS

A graph is a node based data structure that contains a list of other nodes that are linked in the graph. An example of a graphs is a data structure used to represent cities that connect to other cities

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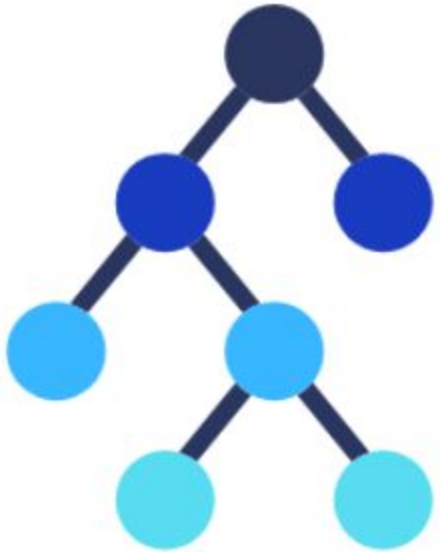
6.) TREES

A Tree is a subtype of a graph that typically imposes the rule that nodes of the tree do not create loops in the data structure. A common use is a binary search tree which can retrieve data in binary time of O(log N)



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Randomized Practice

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Professional Review

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CSIP @ UGA

Computer Science Interview Prep at the University of Georgia

Athens, GA http://csip-uga.github.io

Overview Repositories 3 Packages People 3 Projects

Pinned

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CSIP @ UGA Homepage
HTML 1

archive
Interview Prep Problems
Python 9 2

challenge-001
Word Counting Redux
1

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Conclusion

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