Geethanjali College of Engineering and Technology
Accredited by NAAC with 'A' Grade & NBA, Approved by AICTE and Affiliated to JNTUH
Cheeryal(V), Keesara(M), Medchal Dist., Telangana – 501 301.

Advanced Programming Skills for the Academic Year: 2020-21

Geethanjali College of Engineering and Technology

SMART INTERVIEWS TRAINING

(2020-2021)

Gmail **Gopagoni Praveen Kumar <gopagonipraveen@gmail.com>**

Fwd: GCET- Confirmation regarding the Training Program of our 3rd and 4th year students.

3 messages

Dr. G. Soma Sekhar <gsomasekharonline@gmail.com> Mon, Aug 31, 2020 at 2:45 PM
To: madhusudan.veldanda@gmail.com, somasekhargcet@gmail.com, swathi veldanda <swathiveldanda@yahoo.com>, katkamsrinu@gmail.com, chramesh522@gmail.com, ramakanta5a@gmail.com, kkgcet@gmail.com, puja.s.prasad@gmail.com, ankireddypalli.reddy@gmail.com, adepu.sreelakshmi@gmail.com, ashwini.mamidi@gmail.com, Challa Esther <esthervarmait@gmail.com>, shiva_reddy5017@yahoo.com, gandra.lok29@gmail.com, Srinivas Mulkala <mulkalapalli.cnu@gmail.com>, dvenkates739@gmail.com, hari krishna <kris.hari.k@gmail.com>, M RKK <mrkk.gcet@gmail.com>, rajesh5479@gmail.com, rakeshkumar19221@gmail.com, vijaybhaskarchamp@gmail.com, mayuri.787@gmail.com, ramanji.csit@gmail.com, Naresh Kosuri <naresh.kosuri@gmail.com>, preeti.preetu11@gmail.com, bhavanamungapati@gmail.com, patti.haritha@gmail.com, Radhika Amareshwari <radhika.amareshwari@gmail.com>, Siva Yenikepalli <sivay999@gmail.com>, harinishiva9@gmail.com, Yvn Phanikishore <yvnphanikishore@gmail.com>, g56swapna@gmail.com, nive.gopigari@gmail.com, srinivaskanakala76@gmail.com, 16vikas.chary@gmail.com, ravinder0512@gmail.com, anushareddy.kallem@gmail.com, sujitha.meduri@gmail.com, botlamamatha.74@gmail.com, meenasravanthi210@gmail.com, sadhanaumareddy@gmail.com, muppuvijay@yahoo.com, tejahyalla@hotmail.com, preti553@gmail.com, udayasree554@gmail.com, lochanrampal5@gmail.com, Erukala Mahender <mahee99@gmail.com>, sankatianusha@gmail.com, shivakakkerla1@gmail.com, csneha592@gmail.com, adha_cp21@yahoo.com, orama dasa <umamaheshsjcet@gmail.com>, lalitha_srinivas@yahoo.com, sudha2012.singaraju@gmail.com, gopagonipraveen@gmail.com, ajaymamindla@gmail.com, Kdk Kalyani <kalyani.kdk@gmail.com>, vishwashanthi5b9@gmail.com, annedachandrakala@gmail.com, sandhya.chennoji@gmail.com, padmapanguluri@gmail.com, monika.altr@gmail.com, archanap949@gmail.com, medishettysantosh@gmail.com, anithagcetcse@gmail.com

III CSE and IV CSE class in charges to share with students and mentors to ensure that all students eligible for Placement register for Smart Interview by filling the google form.

---------- Forwarded message ---------
From: **Udaya Susarla** <uksusarla@gmail.com>
Date: Mon, Aug 31, 2020 at 1:12 PM
Subject: Fwd: GCET- Confirmation regarding the Training Program of our 3rd and 4th year students.
To: Soma Sekhar <gsomasekharonline@gmail.com>, sree Lakshmi adepu <adepu.sreelakshmi@gmail.com>, hari_kumarin <hari_kumarin@yahoo.com>, salagrama suryanarayana <ssn68@rediffmail.com>, Madhusudan Veldanda <madhusudan.veldanda@gmail.com>, Radhika Dora <headeeegcet@gmail.com>, radhika dora <radhika7.dora@gmail.com>, swathi veldanda <swathiveldanda@yahoo.com>

Please send to your third year and final year students
Best Regards,

Dr. Udaya Kumar **Susarla** B.E., M.E., M.Tech (Hons), PhD

Principal
Geethanjali College of Engineering and Technology,
Cheeryala (V), Keesara (M),
Medchal Dist. Telangana, Hyderabad - 501301
Cell: +91-9912744988;

PRINCIPAL
Geethanjali College of Engg. and Tech.
Cheeryal (V), Keesara (M), Medchal Dist.(T.S.)-501 301.

---------- Forwarded message ---------
From: **Amit Bansal** <amitbansal@smartinterviews.in>
Date: Mon, Aug 31, 2020 at 1:10 PM
Subject: Re: GCET- Confirmation regarding the Training Program of our 3rd and 4th year students.
To: Geethanjali College of Engineering and Technology <info@gcet.edu.in>, uksusarla <uksusarla@gmail.com>, madhusudan.veldanda <madhusudan.veldanda@gmail.com>

Hello,
Greetings from Smart Interviews.

As discussed, please share the following information with all the current 3rd year students [2022 graduates] of **GCET:**

1. **Registration:** Fill the following google form: https://forms.gle/aXqZ6anXAMovDNXUA . The registrations will close on 6th September, Sunday, 5PM, 2020.
2. **Scores:** You can check your scores in: https://tinyurl.com/si-scoring-gcet-2022
3. **Details:** Do not make a mistake with the usernames, **neither your email address nor your full name denotes your username. Usernames do not have spaces as well.** Explore the platforms, locate your usernames and fill in the excel sheet. Your scores will be updated only if you provide correct usernames. Without your correct usernames, we cannot track your scores, and as such you will not be considered for the training program.
4. **InterviewBit:** For InterviewBit, make sure to turn on the Public Sharing. Go to InterviewBit -> Settings -> Account and set "Public Sharing" as "ON"
5. **Facebook Group:** Everyone must join our facebook group and read a few posts, specially the pin-post: https://tinyurl.com/si-fb-group
6. **WhatsApp Group:** You must join https://tinyurl.com/si-whatsapp-gcet-2022 . All further communications will happen through this WhatsApp group.
7. **Assignments**
    - Basic Assignment-1
        - Any 30 problems from https://www.hackerrank.com/contests/smart-interviews-basic/challenges
    - Basic Assignment-2
        - At least 25 problems from https://www.hackerrank.com/domains/algorithms
    - Basic Assignment-3
        - Any 20 problems from http://codeforces.com/problemset?order=BY_SOLVED_DESC
    - Basic Assignment-4
        - Any 20 problems from https://www.codechef.com/problems/school?sort_by=SuccessfulSubmission&sorting_order=desc
8. **Filtering Target:** Overall Score >= 2000 in https://tinyurl.com/si-scoring-gcet-2022 . Without this, you will not be allowed to sit in the filtering test.
9. **Deadline:** You must meet the above target by 15th September, 2020.
10. **Query:** If you have any queries related to any of the above, feel free to post it in the WhatsApp group.

Do let us know in case you have any queries. Thank You!

Amit Bansal
Founder (Work Ex: Amazon, D.E.Shaw)
919030665101
smartinterviews.in
facebook.com/smartinterviews

On Mon, 31 Aug 2020 at 13:08, Amit Bansal <amitbansal@smartinterviews.in> wrote:

> Hello,
> Greetings from Smart Interviews.
>
> As discussed, please share the following information with all the current 4th year students [2021 graduates] of **GCET:**
>
> 1. **Registration:** Fill the following google form: https://forms.gle/18g4P9UkfHuVJds28 . The registrations will close on 4th September, Friday, 5PM, 2020.
> 2. **Scores:** You can check your scores in: https://tinyurl.com/si-scoring-gcet-2021
> 3. **Details:** Do not make a mistake with the usernames, **neither your email address nor your full name denotes your username. Usernames do not have spaces as well.** Explore the platforms, locate your usernames and fill in the excel sheet. Your scores will be updated only if you provide correct usernames. Without your correct usernames, we cannot track your scores, and as such you will not be considered for the training program.
> 4. **InterviewBit:** For InterviewBit, make sure to turn on the Public Sharing. Go to InterviewBit -> Settings -> Account and set "Public Sharing" as "ON"
> 5. **Facebook Group:** Everyone must join our facebook group and read a few posts, specially the pin-post: https://tinyurl.com/si-fb-group
> 6. **WhatsApp Group:** You must join https://tinyurl.com/si-whatsapp-gcet-2021 . All further communications will happen through this WhatsApp group.

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7. **Assignments**
    - Basic Assignment-1
        - Any 30 problems from https://www.hackerrank.com/contests/smart-interviews-basic/challenges
    - Basic Assignment-2
        - At least 25 problems from https://www.hackerrank.com/domains/algorithms
    - Basic Assignment-3
        - Any 20 problems from http://codeforces.com/problemset?order=BY_SOLVED_DESC
    - Basic Assignment-4
        - Any 20 problems from https://www.codechef.com/problems/school?sort_by=SuccessfulSubmission&sorting_order=desc
8. **Filtering Target:** Overall Score >= 2000 in https://tinyurl.com/si-scoring-gcet-2021 . Without this, you will not be allowed to sit in the filtering test.
9. **Deadline:** You must meet the above target by 10th September, 2020.
10. **Query:** If you have any queries related to any of the above, feel free to post it in the WhatsApp group.

Do let us know in case you have any queries. Thank You!

Amit Bansal
Founder (Work Ex: Amazon, D.E.Shaw)
919030665101
smartinterviews.in
facebook.com/smartinterviews

On Mon, 31 Aug 2020 at 12:28, Amit Bansal <amitbansal@smartinterviews.in> wrote:

Hello,
Greetings from Smart Interviews.

Please find attached the training proposal for both 4th year and 3rd year [2022 graduates] students of Geethanjali College of Engineering and Technology. Please find further details of the training process below:

4th year students [2021 graduates]

1. **Step-1:** Registration of all interested students [CSE/ECE/EEE] using a google form
    - Time: 3 days [expecting around 200+ students]
    - Deadline: 4th September, Friday, 5PM
2. **Step-2:** Basic assignments and progress tracker
    - Time: 7 days
    - Deadline: 10th September
3. **Step-3:** Online Filtering test on HackerRank for the students who meet expectations in the basic assignment [12th September, Time: 4hours]
4. **Step-4:** Start with the online training sessions over zoom
    - Start Date: 14th September, 2020
    - Schedule: 2 sessions in a week, each session has a duration of 3 hours.
    - Total Online Sessions: 15-18 [+few extra lab sessions as and when required]
    - Timeline: September - November, 2020

3rd year students [2022 graduates]

1. **Step-1:** Registration of all interested students [CSE/ECE/EEE] using a google form
    - Time: 3 days [expecting around 300+ students]
    - Deadline: 6th September, Sunday, 5PM
2. **Step-2:** Basic assignments and progress tracker
    - Time: 10 days
    - Deadline: 15th September
3. **Step-3:** Online Filtering test on HackerRank for the students who meet expectations in the basic assignment [18th September, Time: 4hours]
4. **Step-4:** Start with the online training sessions over zoom
    - Start Date: 21st September, 2020
    - Schedule: 2 sessions in a week, each session has a duration of 3 hours, with a few weeks gap in between to cope-up with the assignments.
    - Total Online Sessions: 18-20 [+few extra lab sessions as and when required]
    - Timeline: 75% content in 3-1 and 25% content in 3-2.

Do let us know if there are any additional queries. Thank You!

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Cheeryal (V), Keesara (M), Medchal Dist. (T.S.)-501 301.

Amit Bansal
Founder (Work Ex: Amazon, D.E.Shaw)
919030665101
smartinterviews.in
facebook.com/smartinterviews

On Fri, 28 Aug 2020 at 10:52, Geethanjali College of Engineering and Technology <info@gcet.edu.in> wrote:

> Dear Mr. Amit,
>
> Thank you for your proposal sent to Prof. V. Madhusudhan Rao, Dean, School of Computer Science and Informatics with regard to the training program for our students of 3rd and 4th year. We would appreciate if we can give us complete schedule of the training program for 3rd and 4th year students separately. Further, we request you to ensure that the training program of the final year students is completed before the end of November, 2020. We may conduct the training program scheduling it for a duration of 6hrs. per week, with 3hrs. on each occasion.
>
> Looking forward for your response,
>
> Thanking you,
>
> Best regards,
>
> Dr. Susarla Udaya Kumar
> PRINCIPAL
> Mobile No.: 9866308257
>
> Geethanjali College of Engineering and Technology
> Cheeryal(v), Keesara(m), Medchal Dist., Telangana.

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Thanks and Regards,
Dr.G. Soma Sekhar,
Associate Head,
Dept. of CSE,
Geethanjali College of Engineering and Technology,
Cheeryal(V),Keesara(M),Medchal(Dt).-501 301.
Mobile:9849965314

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swathi veldanda <swathiveldanda@yahoo.com> Mon, May 10, 2021 at 5:14 PM
Reply-To: swathi veldanda <swathiveldanda@yahoo.com>
To: Gopagoni Praveen Kumar <gopagonipraveen@gmail.com>

Sent from Yahoo Mail on Android

> ----- Forwarded message -----
> **From:** "Amit Bansal" <amitbansal@smartinterviews.in>
> **To:** "Udaya Susarla" <uksusarla@gmail.com>
> **Cc:** "Geethanjali College of Engineering and Technology" <info@gcet.edu.in>, "madhusudan.veldanda" <madhusudan.veldanda@gmail.com>, "swathiveldanda@yahoo.com" <swathiveldanda@yahoo.com>
> **Sent:** Mon, 10 May 2021 at 5:06 pm
> **Subject:** Re: GCET- Confirmation regarding the Training Program of our 3rd and 4th year students.
> Hello Team,
> Please find below the students who are underperforming. Please take the necessary measures to make them spend more time on the assignments.
>
> **The following have lost STAR MARK in batch report**

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Geethanjali College of Engineering and Technology

Circular

No. GCET/234/2020-21 **Date:-27-09-2020**

OFFICE OF THE PRINCIPAL

CIRCULAR

All the shortlisted Students of Smart Interviews are hereby informed that the Training will be conducted from 29-09-2020 on Wednesdays and Saturdays from 5:00 PM to 8:00 PM. on the online mode.

To
Deans / HODs

PRINCIPAL

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Geethanjali College of Engg. and Tech.
Cheeryal (V), Keesara (M), Medchal Dist.(T.S.)-501 301.

Topics to be covered in the Training:-

I. Basics of programming
II. Data types & operators
    a. Size/range of data types
    b. Importance of Constraints
    c. Bit Manipulations
III. Complexity Analysis of Algorithms
    a. Big-O Notation
    b. Time & Space
IV. Recursion
    a. Steps to implement recursion
    b. Recurrence Relations
    c. Backtracking with Recursion
V. Sorting Techniques & Applications
    a. Standard sorting algorithms
    b. Applications of Count Sort
    c. Two pointer technique
    d. Inversion Count
VI. Searching Techniques
    a. Linear Search
    b. Binary Search
VII. Applications of Binary Search
    a. Lower Bound & Upper Bound
    b. Finding Frequency
    c. Optimisation problems
    d. Root of a number
VIII. Hashing
    a. Why hashing?
    b. Hashing Techniques
    c. Collision Resolutions
    d. Inbuilt Libraries
IX. Lab Session
    a. Usage of inbuilt libaries
    b. Internal Contest-1
X. Strings
    a. ASCII representation
    b. String Matching Algorithms
    c. Binary Search+Rolling Hash
XI. Arrays
    a. Subarrays
    b. Subsets vs Subsequence
    c. Sliding Window
XII. Mixed-bag problem-solving
    a. Arrays & matrices
    b. Searching/Sorting/Hashing
    c. Prefix-sum
XIII. Miscellaneous Concepts
    a. Prime Numbers
    b. Game Theory
    c. Meet in the Middle
XIV. Stacks and Queues
    a. Multiple stacks in an array
    b. Implement queue using stacks

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c. Area under Histogram

XV. Basics of Linked-Lists
   a. Insert/Search/Delete/Reverse

XVI. Lab Session
   a. Internal Contest-2

XVII. Advanced problems on Linked-List
   a. Intersection point
   b. Cycle Detection
   c. Cloning a Linked-List

XVIII. Basics of Trees
   a. Tree Traversals
   b. Height and Depth
   c. Binary Search Trees

XIX. Advanced problems on Trees
   a. Inorder-Preorder to Postorder
   b. K-distance

XX. Trie DS and Applications
   a. Dictionary & Prefix Matching

XXI. Priority Queues
   a. Min/Max Heap - CBT
   b. Median of subarrays

XXII. Greedy Programming
   a. Greedy Choice Property
   b. Fractional Knapsack
   c. Activity Selection

XXIII. Basics of Dynamic Programming
   a. Memoization vs Tabulation
   b. Applications of Fibonacci Series

XXIV. -D Dynamic Programming
   a. Maximum Subarray Sum
   b. Longest Increasing Subsequence

XXV. 2-D Dynamic Programming
   a. Integer Knapsack & nCr
   b. Matrix Multiplication
   c. Submatrix Sum

XXVI. Basics of Graph Theory
   a. Representation and Traversals
   b. Cycle Detection

XXVII. Important Graph Algorithms
   a. Dijkstra's Algorithm
   b. Kruskal's Algorithm - MST
   c. Topological Sorting
   d. Bipartite Graphs

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Cheeryal (V), Keesara (M), Medchal Dist.(T.S.)-501 301.

Schedule of the Training: - The training is scheduled on Wednesdays and Saturdays from 29-09-2021 to 09-01-2021 5:00 PM to 8:00 PM .on online mode.

29-09-2020

13-10-2020

15-10-2020

17-10-2020

22-10-2020

23-10-2020

27-10-2020

31-10-2020

17-12-2020

19-12-2020

24-12-2020

26-12-2020

29-12-2020

2-01-2021

5-01-2021

7-01-2021

9-01-2021

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Cheeryal (V), Keesara (M), Medchal Dist.(T.S.)-501 301.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC Autonomous)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

ADVANCED PROGRAMMING SKILLS COURSE CONTENT

I. Basics of programming
II. Data types & operators
    a. Size/range of data types
    b. Importance of Constraints
III.
    a. Bit Manipulations
IV. Complexity Analysis of Algorithms
    a. Big-O Notation
    b. Time & Space
V. Recursion
    a. Steps to implement recursion
    b. Recurrence Relations
    c. Backtracking with Recursion
VI. Sorting Techniques & Applications
    a. Standard sorting algorithms
    b. Applications of Count Sort
    c. Two pointer technique
    d. Inversion Count
VII. Searching Techniques
    a. Linear Search
    b. Binary Search
VIII. Applications of Binary Search
    a. Lower Bound & Upper Bound
    b. Finding Frequency
    c. Optimisation problems
    d. Root of a number
IX. Hashing
    a. Why hashing?
    b. Hashing Techniques
    c. Collision Resolutions
    d. Inbuilt Libraries
X. Lab Session
    a. Usage of inbuilt libaries
    b. Internal Contest-1
XI. Strings
    a. ASCII representation
    b. String Matching Algorithms
    c. Binary Search+Rolling Hash

XII. Arrays
   a. Subarrays
   b. Subsets vs Subsequence
   c. Sliding Window
XIII. Mixed-bag problem-solving
   a. Arrays & matrices
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   c. Prefix-sum
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   a. Prime Numbers
   b. Game Theory
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XV. Stacks and Queues
   a. Multiple stacks in an array
   b. Implement queue using stacks
   c. Area under Histogram
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XX. Advanced problems on Trees
   a. Inorder-Preorder to Postorder
   b. K-distance
XXI. Trie DS and Applications
   a. Dictionary & Prefix Matching
XXII. Priority Queues
   a. Min/Max Heap - CBT
   b. Median of subarrays
XXIII. Greedy Programming
   a. Greedy Choice Property
   b. Fractional Knapsack
   c. Activity Selection
XXIV. Basics of Dynamic Programming
   a. Memoization vs Tabulation
   b. Applications of Fibonacci Series
XXV. -D Dynamic Programming
   a. Maximum Subarray Sum
   b. Longest Increasing Subsequence
XXVI. 2-D Dynamic Programming
   a. Integer Knapsack & nCr
   b. Matrix Multiplication
   c. Submatrix Sum
XXVII. Basics of Graph Theory

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a. Representation and Traversals
b. Cycle Detection

XXVIII. Important Graph Algorithms

a. Dijkstra's Algorithm
b. Kruskal's Algorithm - MST
c. Topological Sorting
d. Bipartite Graphs

CO-ORDINATOR **HOD-CSE**

PRINCIPAL
Geethanjali College of Engg. and Tech.
Cheeryal (V), Keesara (M), Medchal (Dist.) 501 301.

Geethanjali College of Engineering and Technology

CHEERYAL (V), KEESARA (M), MEDCHAL.DIST-501301, TELANGANA

Date: 23.11.2021

Circular

Smart Bridge Externship Program

Smart Bridge is planning to organize an **Ideathon** on **04th December 2021** where each team of students will come up with an Idea for Mini Project Development related to **IoT/ AI/ML / Cloud App/ RPA** domains. Each team will present their idea to the panel for evaluation and freezing them for further process.

This event is mandatory for all teams who are part of Smart Bridge. All students are requested to come up with an Idea as a team by 04th December, 2021 for presentation. All HODs are requested to encourage their students for this **Ideathon** towards their Mini Project development Activity.

Mode: Online

Date & Time: 04/12/2021 & 09:15 AM Onwards

Coordinator-SmartBridge
S. Tirupati Rao 23/11/2021

Copy to: Principal, Secretary

HOD-ECE, CSE, EEE, IT and Deans

B. Mamtha

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Geethanjali College of Engg. and Tech.
Cheeryal (V), Keesara (M), Medchal Dist.(T.S.)-501 301

Geethanjali College of Engineering and Technology

Circular

No. GCET/376/2020-21 **Date:-17-06-2020**

OFFICE OF THE PRINCIPAL

CIRCULAR

All the Eligible III Year Students of WIPRO- TalentNext Training are hereby informed that the training will be conducted from 28-06-2020 from 8:00 AM to 11:00 AM. and 4.00 P.M to 7.00 PM in online mode.

To

Deans / HODs

PRINCIPAL

PRINCIPAL
Geethanjali College of Engg. and Tech.
Cheeryal (V), Keesara (M), Medchal Dist.(T.S.)-501 301