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Together in Leach dreat for heights! ACG NEWSLETTE

Official Newsletter of AllCareerGuru. org

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Dear Reader.

Welcome to another edition of our Newsletter. A very happy new (Tamil/Telugu/English/Financial/....) year to everyone. This is also the time where students are looking for the next steps (after 12th/10th/...). We once again request our readers to reach out to our team at allcareerguru@gmail.com or complete the online form if you would need any form of free career counselling.

Due to the season, this edition of our newsletter has no interviews or puzzles, but instead, we have

- an enlarged list of "upcoming exams and deadlines" covering a wide range of entrance tests and careers
- a question-answer piece on the pressing question of whether a student should pursue IT (Information Technology) related degrees

Additionally, we have brief reports on

- recently concluded Bebras Challenge, and our experience with the team at Mannarkoil, Tenkasi district of Tamil Nadu, and
- our recent **personalized** career counseling efforts at Avvai Ashram, run by an NGO at Sivasailam, Tenkasi District, Tamil Nadu.

Among our pupils were some with hearing and speech impairments who completed their 12th grade studying in the special school of the Ashram.

We are revamping our website with a new design and TLD (allcareerguru.org) and as always, we look forward to your feedback and suggestions.

Empowering Futures: Career Counseling at Avvai Ashram Tenkasi District

At AllCareerGuru we believe that career counselling is just as important for the under privileged as much for the well-educated and people with better incomes. This is because the higher education landscape is riddled with multiple kinds of programs and institutions. We also think that career counselling needs to be personalized, in addition to some generic knowledge-sharing sessions, because various people have varied skills, interests, and family constraints.

Towards this goal, Dr. Ananthanarayanan of Amrita University and Dr. Venkatesh Raman of IMSc Chennai conducted a one day career counselling session on 23rd March 2024, for students who have completed twelfth standard, at Avvail Ashram run by Gandhigram Rural trust at Sivasailam, Tenkasi District. This ashram houses a school for special needs pupils(hearing and speech challenged) with a total of about 55 students. It was a heartwarming experience to hear that those special children have completed twelfth (thanks to the Ashram school) and have high aspirations for the future. It was our privilege and honour to listen to everyone's background and experience and recommend potential opportunities post twelfth-grade. We are all eagerly waiting for the results so that we can give a suitable recommendation.

Some pictures of the event are shared below ...





"We also think that career counselling needs to be personalized, in addition to some generic knowledge-sharing sessions, because various people have varied skills, interests, and family constraints."



Click here to read more.

The Bebras India Challenge Concludes: Prize Distribution Marks the Finale!

The Bebras India Challenge concluded in the first half of December 2023 with a record-breaking participation of over 2,10,000 students across 22 states and 2 UTs. This computational puzzle challenge, renowned for pushing the boundaries of problem-solving prowess for young school students, attracted participants from diverse backgrounds and age groups, ranging from 8 to 18 years old.

In a remarkable debut, All Career Guru facilitated the participation of students at Mannarkovil (in Tirunelveli district of Tamil Nadu), VAMA Trust, marking their inaugural entry into the realm of computational puzzle challenges. Twelve students, aged between 9 and 17, embarked on a thrilling journey of intellectual exploration, spending a fun-filled day unravelling the intricacies of the challenge.

Participating in computational puzzle challenges like the Bebras Challenge offers a multitude of benefits for individuals of all ages. Firstly, such challenges serve as an excellent platform for honing critical thinking and problem-solving skills. Participants are tasked with navigating through a series of complex puzzles, requiring them to think analytically, creatively, and strategically. Moreover, these challenges foster a spirit of collaboration and camaraderie among participants. Whether it's brainstorming solutions with peers or seeking guidance from experienced mentors, the challenge creates opportunities for meaningful interactions and knowledge-sharing within the community.

Beyond the intellectual stimulation, computational puzzle challenges also provide a unique avenue for personal growth and development. Participants learn to embrace challenges, overcome obstacles, and persist in the face of adversity, all of which are invaluable life skills that extend far beyond the confines of the challenge itself.

The Bebras Challenge and similar computational puzzle challenges offer a captivating blend of intellectual stimulation, community engagement, and personal growth. As evidenced by the enthusiastic participation of students at Mannarkoil, these challenges provide a platform for individuals to push their boundaries, forge new connections, and embark on a journey of continuous learning and discovery.

Below are the pictures from the certificate distribution ceremony on January 12, 2024, attended by members and founders of All Career Guru and VAMA trust viz. Mr. Venkatesh Raman, Mr. Balaji Rajagopalan, Mr. Rengan, Ms.Hema, and Mr. Muthukumaraswamy.



The Bebras India Challenge concluded in the first half of Dec 2023 with a recordbreaking participation of over 2,10,000 students across 22 states and 2 UTs





To Do or NOT: IT

It is well understood that reading, writing, and arithmetic are considered basic skills to make one a literate person. Along with these three skills, it is increasingly becoming important to have computing as a necessary skill to succeed in the 21st century. Computing skills encompass broadly computational thinking, programming and ability to use some of the computing tools. Just as a massive construction project requires hundreds or thousands of masons (apart from a few civil engineers and architects), massive computerisation (or digitalisation) requires hundreds and thousands of programmers.

Cashing in on this demand, colleges are starting programs like BSc (IT), BSc (CS), BCA, MCA on the one hand, and BE/BTech (IT), BE/BTech (CS), BE/BTech (AI, Machine Learning, Data Science) on the other hand. This article tries to demystify these programs in a question-answer format and offer some perspective for a student trying to choose a career.

Do I really need to get a computing degree to acquire the so-called computing skills?

Certainly NOT. There are a number of training institutes and online courses through which one can acquire the necessary skills within a few months. A deeper knowledge of these requires more practice and experience. In fact, there are several computer savvy experts who do not have computer science degrees (Microsoft CEO, for example).

What if I am starting a college degree? Can I acquire these skills through courses in college?

Yes, many degree programs offer a minor in computer science or even allow you to take a few computer science courses as electives, even if you are specializing in some other discipline.

But most companies coming for placement primarily take computer science graduates?

Yes, as we mentioned in our opening paragraph, there is a huge demand for programmers and students with similar(computing) skills. Companies with such demand, when they come to campuses, take the easy way out of choosing the CS degree holders first (with the hope that they would have been trained in computing skills – this may not always be the case, see the answer to the next question) before trying others.

So to have a successful career in IT, is a computer science degree necessary then?

Not necessarily. As we said in the answer to our previous question, while companies coming to campuses may prefer CS students, there is an increasing realisation that a "computer science" degree should not be confused with skills. That is why one can see thousands of computer science students (who may have the degree, but not the relevant skills) unemployed. Moreover, campus placement is NOT the only route to get jobs. There are several web portals and websites for programming competitions through which companies spot talented students with relevant skill set despite being a non-CS graduate.

So should I choose a CS degree or not?

If you have sound mathematical and analytical abilities and interest in computer science, and if you get an opportunity to do your degree in one of the top institutions, by all means, pursue a CS degree. If you invest time and energy to acquire the basic computing skills, sky is the limit on how far you can go.

In a growing economy like ours, there are not just opportunities, but high demand for experts in many domains including law, mathematics, physics, journalism, design or even other branches of engineering including civil, chemical, electrical or aerospace. It is important to pursue your passion, and obtain a broad set of skill sets during your undergraduate program. In previous editions of our newsletter, we have discussed these opportunities by interviewing successful individuals who have pursued a less travelled path. We at <u>allcareerguru.org</u> can help you in those fields too.

But if you did not get into a good institution, there are still plenty of options, and read on to know more.

How do I know those good institutions?

NIRF ranking (www.nirfindia.org) can be a high level guide. But note that NIRF ranks mostly the entire institution and there may be variations in specific programs. While placement can be an indicator, it certainly need not be the only indicator. You can get information from the seniors. Choose an institution which encourages broad exposure, has a constant stream of external experts visiting and has well qualified teachers willing to work with the students. We at AllCareerGuru can help. Please set up a session with our experts by visiting our website.

If I choose a non CS degree for my under graduation, is it possible to switch to computer science during Masters?

Yes, there are many universities that offer Master's programs in computer science for those who obtained an undergraduate degree in other engineering or science subjects.

What if I am not interested in computer science?

Congratulations for not trying to follow the herd. In a growing economy like ours, there are not just opportunities, but high demand for experts in many domains including law, mathematics, physics, journalism, design or even other branches of engineering including civil, chemical, electrical or aerospace. It is important to pursue your passion, and obtain a broad set of skill sets during your undergraduate program. In previous editions of our newsletter, we have discussed these opportunities by interviewing successful individuals who have pursued a less travelled path. We at allcareerguru.com can help you in those fields too.

But remember that a degree and job are not the only important thing, especially when you are in college. Develop a network of good friends and interesting hobbies, join multiple clubs in the campus and learn as many things as possible.

If I am interested in computer science, should I choose a specialisation like AI or Machine Learning or Data Science or Cyber Security? What are the differences between various BSc (IT/CS) or BCA degrees?

Often colleges create these programs to increase their enrollment. Obviously the subjects you learn in a four year program will be more than what you do in a three year program. We do not encourage you to specialise in your undergraduate degree. It is important to acquire expertise in a broad set of foundational subjects before you specialise. Again remember that regardless of the degree, the institution where you pursue these degrees matter.

I heard about ChatGPT and generative AI. Is it going to change the way we learn?

Yes, a company called OpenAI recently released ChatGPT which has taken the world by storm. While google may have organised the information all across the internet to enable us to search for data in these websites efficiently, OpenAI can not only reproduce the information but can make logical deductions and develop new conclusions and offer them to you in your language. Yes, it can give a recipe you are searching for or generate your program. You can just use it as your mentor to teach you whatever you want to learn. However note that learning is still your responsibility and you still have to have the basic concepts to prompt the tool, called prompt engineering(an upcoming field), and understand the answers it gives. If you use it to cheat in your course projects, note that you miss the opportunity to learn and you will be the ultimate loser. Educationists all over are still figuring out its impact.

I am finishing up my engineering degree. My friends suggest pursuing an MBA degree after engineering. Should I?

Just as computing skills are becoming important, a certain amount of managerial skills are also becoming important in the corporate world for mid-level managers to manage customer relations, large teams, and various other aspects. We believe that these are also skills one can acquire when the need arises through online resources or executive programs. Our suggestion is to stick to technical domains and acquire deeper knowledge at least for a few years after you graduate.

I hear about salary packages in the order of crores; are they real?

In the internet era, certain jobs can be performed sitting anywhere in the world. Because of this, multinational companies hire talents for their offices elsewhere offering sometimes international salaries. If you mod out the living costs in such regions and account for the variable pay in the package, one sees that these CTCs (cost to company) are often inflated. Besides, these are offered to one or two from top institutes, while the average salaries tend to be much much lower. Also the corporate world goes through cycles of economic ups and downs, thus you should not be carried away by these numbers. Most important is to focus on companies where you have active learning possibilities with a stable long term career. Moreover, you should develop skills to manage the ups and downs, not just in the corporate world, but in life in general.

CTiS2024: Computational Thinking in Schools Conference

CSpathshala (<u>cspathshala.org</u>) proudly announces the sixth conference on Computational Thinking in Schools (CTiS2024) on 5th and 6th July, 2024 at IISER, Pune and is hosted by GGIS School, Pune and SCTR's PICT ACM Student Chapter (PASC).

The CTiS (Computational Thinking in Schools) conference is an annual event organised by the ACM, India (Association for Computing Machinery, India) and the CSpathshala community. It aims to bring together teachers, educators, and researchers to discuss issues of curriculum, pedagogy, policy, and implementation, related to bringing computational thinking to schools.

CSpathshala is an ACM India initiative to bring a modern computing curriculum to Indian schools. In our National Education Policy 2020 and in many countries across the world, Computational Thinking (CT) has been identified as one of the essential subjects to be taught and a critical skill to be developed in children during the school years. It advances the notion that the Mathematics and Science behind Computer Science go far beyond the simple ability to use computers, and can be taught and discussed in schools even without the use of computers. The first CTiS conference was held in Pune in April 2019, and this CTiS2024 is the sixth edition. All five editions were greatly successful and were well received by teachers and educators. CTiS2023 addressed the theme Enhancing teacher preparation for integrating computational thinking with over 200 participants at IISER Pune across 10 states and 2300+ participants online across 21 states and 5 countries (Australia, Brazil, New Zealand, Singapore, and Switzerland).

CTiS2024 aims to provide a platform for teachers, educators, and experts to share their best practices as well as challenges faced in implementing computational thinking in education. The discussions will focus on integrating CT activities both plugged and unplugged (with or without the use of computers) in various school subjects, on student learning outcomes and on disseminating findings from CT based experiments or classroom research conducted by teachers and educators across the country. The conference will feature keynote speeches, workshops, panel discussions, and paper presentations on various themes related to computational thinking.

Link to call for abstracts: https://event.india.acm.org/ctis/call-for-abstract/

CSpathshala proudly announces the 6th conf on Computational Thinking in Schools (CTiS2024) on 5th, 6th July, 2024 at IISER, Pune

Upcoming Exams and Deadlines

Here, we provide links and deadlines for various entrance exams and scholarships.

1. Exam Name: SSC CHSL (Staff Selection Commission-Combined Higher Secondary Level)

Tier/Phase:: Tier 1
Exam Date:: June - July 2024(Tentative)
Eligibility criteria:: The minimum educational criteria for SSC CHSL eligibility is to have passed the 12th standard or an equivalent examination from a recognized university or board.
Age Limit:: 18 years to 27 years (relaxation period of 3 to 15 years are available depending on our category)
Website:: https://ssc.nic.in/

2. Exam Name: IES/ISS (Indian Economic Services / Indian Statistical Services)

Application Date: 30 April 2024 Exam Date : 21 June 2024 Eligibility

A candidate for the IES must have completed a Postgraduate Degree in Economics/Applied Economics/Business Economics/Econometrics from a recognized University.

A candidate for the ISS must have obtained a Bachelor's Degree with Statistics/Mathematical Statistics/Applied Statistics as one of the subjects or a Master's degree in Statistics/Mathematical Statistics/Applied Statistics from a recognized University.

Age limit: the candidate must have attained the age of 21 years and must not have attained the age of 30 years on the 1st of August of the year in which the examination is being held Website: https://upsc.gov.in/

3. Exam Name: CUET (CENTRAL UNIVERSITY ENTRANCE TEST)

Exam Date: 15 May - 31 May Eligibility

Candidates of any age who have finished class 12 or are appearing in 2024 may take the CUET (UG) – 2024 test. However, applicants must meet the age requirements of the university, institution, or organization they want to attend.

Candidates must have earned at least 50% in class 12th for General and 45% for SC/ST.

Website: cuet.samarth.ac.in.

4. Exam Name: UGEE (Undergraduate Entrance Examination)

Exam Date: 4th May 2024(9 AM to 12 PM) Interview date: 11th to 13th June 2024 (Online) Eligibility criteria: Passed 12th class or equivalent with Maths, Physics and Chemistry by June 2024. Website: https://ugadmissions.iiit.ac.in/ugee2024/

5. BITSAT (Birla Institute of Technology and Science Admission Test)

Purpose: Primarily for admission to IITs, IISc, NITs and other top engineering colleges
Exam Date: 19th May 2024 to 24 May 2024
Eligibility Criteria: 12th pass (PCM or PCB) with 75% aggregate mark and 60% in each subject.
Website: https://www.bitsadmission.com/bitsatmain.aspx?id=11012016

Competitive exams after 12th

Competitive exams after 12th

ENGINEERING Joint Entrance Examination (JEE) Main

https://jeemain.nta.ac.in/ Joint Entrance Examination (JEE) Advanced https://www.jeeadv.ac.in/ Undergraduate Entrance Examination (UGEE) https://ugadmissions.iiit.ac.in/ugee2024/ BITSAT https://www.bitsadmission.com/bitsatmain.aspx?id=11012016

MEDICAL:

National Eligibility cum Entrance Test (NEET) https://www.nta.ac.in/

MARINE , NAVY, DEFENCE

Indian Maritime University Common Entrance Test https://www.imu.edu.in/ Indian Navy B.Tech Entry Scheme https://www.joinindiannavy.gov.in/ Indian Navy Sailors Recruitment https://www.joinindiannavy.gov.in/

DEFENCE

Indian Army Technical Entry Scheme (TES) www.joinindianarmy.nic.in/ National Defence Academy and Naval Academy Examination (I) www.upsc.gov.in/

FASHION AND DESIGN

National Institute of Fashion Technology (NIFT) Entrance Test www.nift.ac.in/ National Institute of Design Admissions www.admissions.nid.edu/ All India Entrance Examination for Design (AIEED) www.aieed.com/

HUMANITIES AND SOCIAL STUDIES

Central University Entrance Test (CUET) for UG courses https://cuet.samarth.ac.in/ IIT Madras Humanities and Social Sciences Entrance Examination (HSEE) https://hsee.iitm.ac.in/ TISS Bachelors Admission Test (TISS-BAT) http://tiss.edu/admissions

LANGUAGE

The English and Foreign Languages University Hyderabad Entrance Test www.efluniversity.ac.in/

AGRICULTURE, MANAGEMENT & HOTEL MANAGEMENT

Indian Council of Agricultural Research ICAR AIEEA-UG-PG www.icar.org.in/ Integrated Program in Management Admission Test https://www.iimidr.ac.in/ All India Hotel management Entrance Exam NCHMCT JEE http://nchm.nic.in/

LAW

Common Law Admission Test http://clat.ac.in/ All India Law Entrance Test (AILET) www.nludelhi.ac.in/

PURE SCIENCE

Indian Institutes of Science Education and Research https://www.iiseradmission.in/ National Entrance Screening Test (NEST) www.nestexam.in/

MATHEMATICS

Chennai Mathematical Institute (CMI) Admission https://www.cmi.ac.in/admissions/ Indian Statistical Institute Admission www.isical.ac.in/index.php

Send your answer to the puzzle, comments and other suggestions to

newsletter@allcareerguru.com We would love to hear from you.

allcareerguru.org

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