

Curriculum Vitae

Arjun Arul

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Date of Birth : August 23, 1992

Education

Chennai Mathematical Institute M.Sc. in Computer Science CGPA: 9.18/10	2014 - 2016
Chennai Mathematical Institute B. Sc. (Hons) in Mathematics and Computer Science CGPA in Computer Science: 9.4/10	2010 - 2013
DAV Boys Senior Secondary School Senior Secondary	CBSE 2009-10

- **Co-authored a paper** on Robot Games, which was presented at Quantitative Aspects of Programming Languages (**QAPL**) in The European Joint Conferences on Theory and Practice of Software (**ETAPS**) 2013, in Rome, Italy.
It was based on original research, done under the guidance of Prof. Laurent Doyen and Prof. Dietmar Berwanger at Laboratoire Spécification et Vérification, **ENS Cachan, France** in Summer, 2012. We obtained new algorithms and completeness proofs for certain decidable restrictions of the game, which arises from Automata Theory. The paper can be found [here](#).
- **Two time ACM ICPC World Finalist** (Warsaw 2012, Saint Petersburg 2013). Was part of a **two member team** which placed first at the ACM ICPC Asia Regionals, Kanpur 2012.
ACM International Collegiate Programming Contest is the largest programming contest in the world, with a participation of over 25,000. Worldwide, around 110 teams are selected for the World Finals.
- Selected to attend the **International Olympiad in Informatics Training Camp** in 2009 and 2010, finishing with a rank of 7, both the years.
Around 25 students from India are selected for the Training Camp and the top 4 represent the country at the International Olympiad in Informatics (IOI).
- Was part of a three member team which finished first in the National Finals and represented India at the **SEARCC International Student Software Competition 2009**, held in Colombo, Sri Lanka, where we came first.
- Was awarded the Kishore Vaigyanik Protsahan Yojana scholarship by the Department of Science and Technology, Government of India in 2011. It is awarded to around 50 students every year.
- Was awarded the INSPIRE scholarship by the Department of Science and Technology, Government of India in 2011. Around 50 students are selected annually.
- Was awarded the National Science Talent Search Scheme scholarship in 2008 by the National Council of Educational Research and Training, Government of India.

- Qualified to write the **Indian National Mathematical Olympiad** for 3 years: 2008, 2009, 2010 and the Indian National Astronomy Olympiad in 2010.
- Cleared the IIT JEE, AIEEE and was selected for the Undergraduate programmes in Indian Institute of Technology(IIT) and many other Indian Universities. Was also granted admission in National University of Singapore(NUS).
- Participated in various Talent Search Examinations, Mathematical Olympiads and Science Olympiads and received National Ranks of 1,2,7,8,9,10,10,12, etc and State Ranks of 1,1,1,3,3,4,6,8,9, etc.
- Scored 97% in Senior School Certificate Examination, 2010 and was awarded the Certificate of Merit in Computer Science by Central Board of Secondary Education.
- Scored 98% in Secondary School Examination, 2008 and was awarded the Certificate of Merit in Mathematics by Central Board of Secondary Education.

Activities

- Was a Coach at the International Olympiad in Informatics Training Camp, Bangalore in 2011, 2014, 2015 and 2016.
- Deputy Leader of the Indian contingent to the International Olympiad in Informatics 2016, held in Kazan, Russia.
- Was a Judge at the ACM ICPC Asia Chennai Regionals 2015 and 2016, where over thousand teams participated.
- Conducted and lectured in various coding camps, aimed towards competitive programming.
- Was part of a two member team which conducted the Fiesta 2010 On site Programming Contest, an event of the annual inter-collegiate festival of Chennai Mathematical Institute.
- Was **Teaching Assistant** for 2 courses in Chennai Mathematical Institute: Introduction to Programming in Haskell and Introduction to Programming in Python.
- Did a project in **Graph Theory** under Prof. Samir Dutta, Chennai Mathematical Institute in Summer, 2011. We worked on some open problems in Planar Graph Embedding.
- Studied a series of papers on **Persistent Data Structures** and presented a data structure for the computational geometry problem of planar point location .
- Participated in the **Workshop on Recent Advances in Data Structures**, Institute of Mathematical Sciences in 2011.
- Attended the Advanced School on Parameterized Algorithms and Kernelization (**ASPAK 2014**) at the Institute of Mathematical Sciences.
- Selected to attend the Institute of Theoretical Computer science and Communications Winter School, 2013 in **The Chinese University of Hong Kong**.
- Attended the Annual Conference on Foundations of Software Technology and Theoretical Computer Science (**FSTTCS**) 2012, held in Hyderabad.
- Participated in the **Workshop on Pseudorandomness**, 2011 held in Chennai Mathematical Institute.
- Participated in the **Workshop on Graph Algorithms**, 2012 conducted in Indian Statistical Institute, Chennai.
- Attended the **Automata, Concurrency and Timed Systems (ACTS) III**, held in Chennai Mathematical Institute in 2011.
- Participated in the 43rd Annual Conference conducted by Association of Mathematics Teachers of India in 2008 and presented a paper on 'Reflection Triangles'.
- Served as the Batch Representative and member of Hostel Committee for 5 years in University.

Selected Coursework

	<i>Grades</i>
<i>Computer Science</i> :	
Automata Theory and Verification	10
Discrete Mathematics	9
Computational Geometry	9
Game Theory	10
Design and Analysis of Algorithms	9
Theory of Computation	9
Programming in Haskell	10
Advanced Programming in Python	10
Graph Theory	8
Topics in Advanced Data Structures	9
Computational Complexity Theory	10
Programming Language Concepts	10
Mathematical Logic	9
Randomized Algorithms	10
Approximation Algorithms	9
Coding Theory	9
Kernelization	8
Optimization Techniques	9
Dynamic Graph Algorithms	9
Parameterized Algorithms	10
Algorithmic Game Theory	10
Complexity Theory II	9
Concurrent Programming	10
Online & Approximation Algorithms	10
Advanced Combinatorics & Probabilistic Methods	10
Audited Courses:	
Automata Theory and Verification II	
Analytic Combinatorics	
Infinite Discrete Structures	
Recursion Theory	

Overall Undergraduate CGPA : 8.07

Overall Graduate CGPA : 9.18

Other Courses : Algebra I, II, III and IV; Calculus I, II and III;
Probability Theory; Real Analysis; Complex Analysis;
Topology; Differential Equations
Humanities: English, Economics;