## Bhadrachalam Chitturi

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### **Education**

- Ph.D. in Computer Science, University of Texas at Dallas.
- M.S. in C.S., University of North Texas, Denton
- B.S. in C.S. and Engineering, College of Engineering, OU, India.

# **Research Interests:**

- Algorithm Design and Analysis.
- Bioinformatics/Biocomputation.
- Machine Learning

# **Representative Publications**

- B. Chitturi. Computing cardinalities of subsets of  $S_n$  with k adjacencies, JCMCC, to appear in 2020.
- B. Chitturi and P. Das. Sorting permutations with transpositions in  $O(n^3)$  amortized time. Theoretical Computer Science Volume 766, 25 April 2019, Pages 30-37.
- B. Chitturi; Balachander, Srijith; Satheesh, Sandeep; Puthiyoppil, Krithic. 2018. "Layered Graphs: Applications and Algorithms." *Algorithms* 11, no. 7: 93.
- B. Chitturi, Shuoyong Shi, Lisa Kinch and Nick Grishin. Compact structure patterns in proteins. *Journal of Molecular Biology*, 428 (21), pp. 4392-4412, 2016.
- B. Chitturi. Tighter upper bound for sorting permutations with prefix transpositions. *Theoretical Computer Science*, (602): 22-31, 2015.
- B. Chitturi, I. Hal Sudborough. Bounding Prefix Transposition Distance for Strings and Permutations. *Theoretical Computer Science* (421):15-24, March 2012.
- B. Chitturi. A note on Complexity of Genetic Mutations. *Discrete Mathematics Algorithms and Applications* (3)(3):269-286, 2011, September 2011.
- S-Y. Shi, B. Chitturi, and N.V. Grishin. ProSMoS server: a pattern-based search using interaction matrix representation of protein structures, *Nucleic Acids Research* (37): 526-531, PMID: 19420061, 2009.

### **Peer Review Activity**

Journals/Societies: American Mathematical Soceity. Theoretical Computer Science (TCS).

Discrete Mathematics. The SIAM Journal on Discrete Mathematics (SIDMA). SCIENCE CHINA Information Sciences. Journal of Discrete Mathematics. BMC Bioinformatics. The Journal of Supercomputing. Mathematis (MDPI).

Conferences: SCS'19, ICMSAO'19, ICACCI-2018, ICACCI-2017, SAI-2017.

ICACCI-2016, SBB-2016. CoCoNet 2015. COCOON 2011. COCOA 2011. ISAAC 2009.

### Service to my community

o Technical Pogram Committee member of CoCoNet, 2019, ICACCI, 2019, SCS'19, ICMSAO'19, ICACCP'19, SCMM-2019, IACC 2018, ICACCI 18, SAI18, (CSA 2017, SSCC-17, SAI'17, ICACCI 16, SBB'16, ISTA'16, CoCoNet 2015, COCOA 2011,

o Session Chair: ICACCI-30:NLP'18, SSCC-17, ICETIC/ICETEST, SecurIT-2012, BIOCOMP 2010.

o Program Chair: AFMSS 2018

## **Contributions to The On-Line Encyclopedia of Integer Sequences**

Main contributor to the sequence: A058986

Contributed to the existing OEIS sequences: A000240 (M2763 N1111)

A008290 A123513 A000757 A134832 (A135799, A134515)

Extended the following sequences: A048200 and A186752.