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home   Updated 32 minutes ago

ஸ்ரீநிவாஸன் கண்ணன்

K.Srinivasan

(also known as: **Srinivasan Kannan, Shrinivaasan Kannan, Shrinivas Kannan)**

Shortest CV - [**LatexPDF**](#)

Longest CV - [**PDF**](#)

Longest CV - [**Text**](#)

[**Krishna iResearch Open Source Products - open source research initiative of self - (2003 - Present) - Profile (SourceForge), Profile (GitHub)**](#)

NeuronRain - a new Machine Learning, Cloud and Messaging augmented OS:

NeuronRain Research - SourceForge Repositories - academic research and astronomy oriented:

[ACADPDRAFTS -](#) [Publications, Drafts](#) etc.,

[VIRGO - VIRtual Generic Os -](#) [Linux kernel fork-off (kernel modules,system calls etc.,) with cloud and machine learning features (32 bit based on 4.1.5 mainline)](#)

[VIRGO64](#) - 64 bit version of previous VIRGO Linux kernel based on 4.10.3 mainline

[USBmd](#) - USB driver kernel module for network analytics, debugging etc.,

ASFER - AStroinFER - BigData Analytics and Machine Learning Software for Large Data Sets (at present implemented for Astronomical Datasets)

KING COBRA - Linux kernelspace messaging with miscellaneous applications

NeuronRain Enterprise - GitHub Repositories - for enterprise cloud deployments:

VIRGO - VIRtual Generic Os - Linux kernel fork-off (kernel modules,system calls etc.,) with cloud and machine learning features (32 bit based on 4.1.5 mainline)

VIRGO64 - 64 bit version of previous VIRGO Linux kernel based on 4.10.3 mainline

USBmd - USB driver kernel module for network analytics, debugging etc.,

ASFER - AStroinFER - BigData Analytics and Machine Learning Software for Large Data Sets

KING COBRA - Linux kernelspace messaging with miscellaneous applications

Krishna_iResearch_DoxygenDocs - Documentation for NeuronRain open source product codebases (NeuronRain - Architecture Diagrams 1 , NeuronRain - Architecture Diagrams 2)

NeuronRain Documentation in ReadTheDocs and FAQ

Krishna iResearch (old link updated in 2006)

Blog

The opensource codebases in SourceForge and GitHub above are non funded,non profit academic research efforts. Premium technical support is available for above opensource codebases. GitHub repositories implement NeuronRain Enterprise and SourceForge repositories implement NeuronRain Research versions. Dual licensed closedsource premium commercial versions with enhanced features on above GPL products in development since 2010.

GRAFIT Open Learning - Free online course materials

Research statements

Research statement 1 (2010)

Research statement 2 - with some proof sketches (2011)

Research statement 3 - with some proof sketches (2014)

Team Patents (Sun Microsystems - 2000-2005)

Disclosure - Patent Pending (Sun Microsystems - 2002)

Survival Index Based Transaction Timeout Manager

Publications (2008-2011) - (CMI-IMSc-IITChennai) guided and reviewed
(*Advisors/Co-Authors in Google Scholar*)

Few Algorithms for Ascertaining Merit Of a Document

(Master's thesis) arXiv Link to Few Algorithms for Ascertaining Merit of a Document

Presentation slides - Few Algorithms for Ascertaining Merit Of a Document

(Published during PhD - October 2010) TAC 2010 dataset evaluation - Update summarization with Interview Algorithm (with some updates added to the above)- paper

TAC 2010 dataset evaluation - Update summarization with Interview Algorithm (with some updates added to the above)- slides

NIST TAC 2010 link to Update Summarization with Interview Algorithm

Decidability of Existence and Construction of a Complement of a given function

arXiv Link to Decidability of Existence and Construction of a Complement of a given function

Circuits for Complement of a function - old version

Publication Drafts (PDF and Text) (NOTE: These are not final versions and are work in progress) (2012 - present) - unguided and unreviewed

Complexity Theoretic Analysis of Non-majority and Majority Social Choice, Voting, Condorcet Jury Theorem, Complement Function, Ramsey coloring, Riemann Zeta Function, Hypergeometric Functions, Graph theoretic and Computational linguistic Intrinsic merit of text, Neural Networks and Deep Learning, Quantum mechanics, Hash

Functions, Integer Partitions, Space filling, Linear Programming, Factoring and Connections amongst them etc., *(most recent draft updates to all publications previously and earlier drafts below - in text format - nonlinear theoretical writeups interspersed between NeuronRain AsFer code commits in SourceForge and GitHub):*

NeuronRain Research AstroInfer Design Document [SourceForge]

NeuronRain Enterprise AstroInfer Design Document [GitHub]

Earlier Drafts:

Integer Partitions and Hash functions (**in Tex**) **- 2012**

Interview Algorithm is in IP=PSPACE (**in Tex**) **- 2012**

Few Non-trivial Questions and Shell Turing Machines (in Tex) - 2012

Complexity aspects of Non-majority and Majority Social Choice, Hash Functions, Integer Partitions, Graph theoretic Document summarization etc.,:

Arrow's Theorem, Circuit For Democracy and Pseudorandom Choice and P Versus NP - (Draft - 17 September 2014)

Document Summarization from WordNet Subgraph obtained by Recursive Gloss Overlap (Draft - 25 July 2014)

Integer Partitions and Hash Functions (new version - 5 April 2014 and 17 April 2014)

Lower Bounds for Majority Voting and Pseudorandom choice

Circuits For Computing Error Probability of Majority Voting (new version - 10 April 2014)

Circuits For Computing Error Probability of Majority Voting **(old version - March 2013)**

[In-depth Analysis of a Variant of Majority Voting with relation to ZFC - updated draft](#) **(new version - 8 February 2014)**

[In-depth Analysis of a Variant of Majority Voting with relation to ZFC](#) **(old version - 8 March 2013)**

Parallel PRG and Space Filling:

[A Chaos theoretic Parallel Pseudorandom generator in RNC For Majority Voting and Pseudorandom Choice](#)

[Analysis of a Randomized Space Filling Algorithm and its Linear Program Formulation - updated draft additions for Cellular Automaton Algorithm, NC circuit construction for it](#)

[Analysis of a Randomized Space Filling Algorithm and its Linear Program Formulation](#) **(previous version)**

Discrete Hyperbolic Factorization - previous versions:

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization](#) **(Version 1)**

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - with Interpolation Search](#) **(Version 2 - updated 25 June 2013)**

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - with Interpolation Search](#) **(Version 3 - updated 30 June 2013 with [rough notes](#))**

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - with Interpolation Search](#) **(version 4 - updated 1 July 2013 and Version 5 - updated 20 July 2013 including all handwritten notes)**

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - using Rectangular Binary (or) Interpolation Search (version 12 - updated 25 August 2013)](#)

[Informal Notes on Derivation of Upperbound for Discrete Hyperbolic Factorization with Stirling Formula - using Rectangular Binary or Interpolation Search (10 September 2013)](#)

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - using Rectangular Binary (or) Interpolation Search applying Stirling Formula (Version 14 - 20 September 2013)](#)

Discrete Hyperbolic Factorization - Parallel RAM algorithm:
[An NC algorithm and some Sequential Search Algorithms for Discrete Hyperbolic Polylogarithmic Sieve For Factorization using Binary or Interpolation Search with Stirling Formula and Logarithmic Sorted Tile Merge in PRAM model (20 November 2013](#)**) and** [AsFer PRAM implementation design notes with tile id(s) (21 November 2013)](#)

[An NC algorithm and some Sequential Search Algorithms for Discrete Hyperbolic Polylogarithmic Sieve For Factorization using Binary or Interpolation Search with Stirling Formula and Logarithmic Sorted Tile Merge in PRAM model - updated draft with PRAM to NC reduction and input size details and references (25 September 2014)](#)

Miscellaneous Informal Notes related to above drafts (Handwritten) (Note: these are not in any structured format and might have typos and errors)

[Implication Graphs, Error probability of Majority Voting and P Versus NP Question](#)

[Minimum Convex Hulls of Implication Graphs and Hidden Markov Model on class nodes of Concept Hypergraph](#)

[Minimum Convex Hulls of Implication Random Growth Networks and Perfect Voter Decidability](#)

[Philosophical Analysis of Democracy Circuit and Pseudorandom Choice](#)

[Schur's Theorem, Restricted Partitions with distinct parts and Hash Table Collision Chains](#)

[Riemann Zeta Function, Ramanujan Graphs and Ihara Zeta Function](#) **- (30 August 2014)**

[Riemann Zeta Function, Ramanujan Graphs and Ihara Zeta Function](#) **- (25 October 2014)**

[Miscellaneous notes on Krishna iResearch Open Source products design, Democracy Circuit, Complement Function circuit and Parallel RAM to NC reduction for ANSV algorithm in Discrete Hyperbolic Factorization - (6 January 2015)](#)

Publication Drafts (TeX) (NOTE: These are not final versions and are work in progress)

[Arrow's Theorem, Circuit For Democracy and Pseudorandom Choice and P Versus NP - (Draft - 17 September 2014)](#)

[Document Summarization from WordNet Subgraph obtained by Recursive Gloss Overlap (Draft - 25 July 2014)](#)

[Integer Partitions and Hash Functions (new version - 5 April 2014 and 17 April 2014)](#)

[Lower Bounds for Majority Voting and Pseudorandom choice](#)

[Circuits for Computing Error Probability of Majority Voting (new version - 10 April 2014)](#)

[Circuits For Computing Error Probability of Majority Voting](#) **(old version - March 2013)**

[In-depth Analysis of a Variant of Majority Voting with relation to ZFC - updated draft](#) **(new version - 8 February 2014)**

[In-depth Analysis of a Variant of Majority Voting with relation to ZFC](#) **(old version - 8 March 2013)**

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[A Chaos theoretic Parallel Pseudorandom generator in RNC For Majority Voting and Pseudorandom Choice](#)

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[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - with Interpolation Search](#) **(Version 2 - updated 25 June 2013)**

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - with Interpolation Search](#) **(Version 3 - updated 30 June 2013)**

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - with Interpolation Search](#) **(Version 4 - updated 1 July 2013 and Version 5 - updated 20 July 2013 including all handwritten notes)**

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - using Rectangular Binary (or) Interpolation Search (Latest - version 12 - updated 25 August 2013)](#)

[Discrete Hyperbolic Polylogarithmic Sieve For Integer Factorization - using Rectangular Binary (or) Interpolation Search applying Stirling Formula (20 September 2013)](#)

Discrete Hyperbolic Factorization - Parallel RAM algorithm:
[An NC algorithm and some Sequential Search Algorithms for Discrete Hyperbolic Polylogarithmic Sieve For Factorization using Binary or Interpolation Search with Stirling Formula and Logarithmic Sorted Tile Merge in PRAM model (20 November 2013)](#)

[An NC algorithm and some Sequential Search Algorithms for Discrete Hyperbolic Polylogarithmic Sieve For Factorization using Binary or Interpolation Search with Stirling Formula and Logarithmic Sorted Tile Merge in PRAM model - updated draft with PRAM to NC reduction and input size details and references (25 September 2014)](#)

Personal Memorabilia and selected photos

[Passport (May 2015)](#)

[At Mahabalipuram - September 2012](#)

[View of SIPCOT TCS from CMI in twilight - August 2010](#)

[CMI Alumnus page](#) **(2010-)**

[COBRA (a not-so-naive cloud precursor implemented during BE in 1999 on CORBA)](#)

[Sun Microsystems group photo 1 (2000)](#)

[Sun Microsystems 2 (2004)](#)

[Sun Microsystems 3 (2004)](#)

[PSG Tech Photos (1995-1999)](#)

[PSG Tech Alumnus Page (1999-)](#)

Past photos - 1 **(2003)**

Past photos - 2 **(2003)**

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