ka.shrinivaasan@gmail.com

home Updated 19 minutes ago

Share

ஸ்ரீநிவாஸன் கண்ணன்

Srinivasan Kannan *(alias)* Shrinivaasan Ka *(alias)* Shrinivas Kannan

Blog

CV - PDF

CV - Text

Krishna iResearch Open Source Products - not for profit open source, long term research initiative, started by self - (2003 - Present) - Profile (SourceForge), Profile (GitHub)

NeuronRain - Subsystems of a new Machine Learning, Cloud and Queue augmented OS:

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

ACADPDRAFTS - Publications, Drafts, Education, Work related

documents and Photo ID Proofs (uploaded to Sourceforge.net Project)

VIRGO - VIRtual Generic Os - Linux kernel extensions (kernel modules,system calls etc.,) for cloud - may underly a high-level Cloud OS

USBmd - Modified linux USB driver kernel module for USB debugging

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

KING COBRA - a distributed byzantine request servicing software on cloud with queues and arbiters

NeuronRain Enterprise - GitHub Repositories - for enterprise cloud deployments:

VIRGO - VIRtual Generic Os - Linux kernel extensions (kernel modules,system calls etc.,) for cloud - may underly a high-level Cloud OS

USBmd - Modified linux USB driver kernel module for USB debugging

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

KING COBRA - a distributed byzantine request servicing software on cloud with queues and arbiters

Krishna_iResearch_DoxygenDocs - Documentation for AsFer, VIRGO, KingCobra, Acadpdrafts and USBmd open source product codebases

Krishna iResearch (old link updated in 2006)

The opensource codebases in SourceForge and GitHub above are nonprofit academic research efforts. Premium technical support is available for above opensource codebases. GitHub repositories implement NeuronRain Enterprise and SourceForge repositories implement NeuronRain Research versions.

GRAFIT (earlier ZODIAC DATASOFT)

Premium Classroom IT Training is done - Training Materials and Related

Dual licensed closedsource premium commercial versions with enhanced features on above GPL products in development since 2010.

Research statements

Entries at Google Scholar

Research statement 1 (2010)

Research statement 2 - with some proof sketches (2011)

Research statement 3 - with some proof sketches (2014)

Publications (2002 and 2008-2011)

Survival Index Based Transaction Timeout Manager (invention disclosure done for Sun Microsystems in 2002 (now Oracle) which was not filed as a patent application)

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 (TeX and PDF - 2012)

Integer Partitions and Hash functions (in Tex)

Interview Algorithm is in IP=PSPACE (in Tex)

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

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

Complement Function and RZF:

Decidability of Existence and Construction of a Complement of a given function - updated draft additions for Complement Function Circuit construction, relations to Riemann and Ihara Zeta Functions, PAC learning

Majority Voting, P Vs NP, Hash Functions, Integer Partitions, WordNet Summarization:

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 Grid 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)

Discrete Hyperbolic Factorization - Parallel RAM algorithm - Most Recent Version:

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)

Krishna iResearch Open Source Products (AsFer, USBmd, VIRGO, KingCobra, Acadpdrafts) - High Level Handdrawn Architecture Diagram

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)

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

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)

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)

Discrete Hyperbolic Factorization - Parallel RAM algorithm - Most Recent Version:

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)

SunMicrosystems group photo (2000)

PSG Tech Photos (1995-1999)

PSG Tech Alumnus Page (1999-)

Past photos - 1 (2003)

Past photos - 2 (2003)