K S Bharathwaj

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EDUCATION

National Institute of Technology Tiruchirappalli   Tiruchirapalli, India
Bachelor of Technology, Electrical and Electronics Engineering   May 2018 (Expected)

Vidya Mandir Sr Sec School   Chennai, India
HIGH SCHOOL (SCORE: 96.2%)   March 2014

EXPERIENCE

National University of Singapore | SUMMER RESEARCH INTERN
PRINCIPLE INVESTIGATORS: DR MICHAEL GIRARD, DR ALEXANDRE THIERY
May 2017 - Aug 2017 | Singapore

- Developed new deep learning architectures using Keras to obtain state-of-the-art segmentation of the Optic Nerve Head from Optical Coherance Tomography scans.
- Achieved higher dice scores than any other model. Results to be published in Biomedical Optics Express.

Indian Institute of Technology (IIT), Delhi | RESEARCH INTERN
MENTOR: DR. RAHUL GARG
Jul 2016 - Aug 2016 | Delhi, India

- Improved performance of Granger causality analysis of fMRI scans of human brain.
- The project was implemented in Nvidia CUDA C platform involving parallelization of existing algorithms. BLAS concepts were extensively used.

Delta Force (Computing Club, NIT Trichy) | SOFTWARE DEVELOPER
Aug 2015 - Present | Tiruchirappalli, India

- Head of web operations and System administrator for NITTFEST (cultural fest).
- Responsible for building and maintaining the entire computing infrastructure used by around 5,000 students.

PROJECTS

- Forecasting generation of renewable energy using recurrent neural networks - Fall 2017
- Random decision classifier based on mini-max rule to enhance general classifiers. - Fall 2016

COURSEWORK

Data Structures & Algorithms
Pattern Recognition
Machine Learning
Image Processing
Linear Algebra
Differential Calculus

PROGRAMMING

PROFICIENT
C • C++ • Java • Python
FAMILIAR
Matlab • Tensorflow
CUDA • MongoDB • LaTeX
PHP • NodeJS

AWARDS

- 4th - SCDC, IIT Madras (2016)
- 2nd - GPU coding NIT Trichy(2015)
- Inspire Scholarship MHRD, Govt. of India (2014)
- 1st - Quiz, Royal Society of Chemistry, Indian Division (2014)
- 14th - National Math Olympiad (2010)