Avi Srivastava

700 Health Science Drive
Stony Brook, New York 11790
📞 (631) 974 8087
✉ avi.srivastava@stonybrook.edu

Current Research Interests

Scalable Algorithms for High Throughput Genomic Analysis
Generative Graphical Modeling for Genomic data

Education

2014–2016 **Ph.D.**, *Stony Brook University*, Stony Brook, *GPA − 3.77*.

2008–2012 **Bachelor of Technology**, *College of Engineering Roorkee*, Roorkee(India), *Percent − 71.76%*.

Employment

2015–Present **Research Assistant**, *Department of Computer Science*, Stony Brook university.

2014–2015 **Teaching Assistant**, *Department of Computer Science*, Stony Brook university.

2013–2014 **Software Engineer**, *Accenture Services Pvt Ltd.*, Pune, India.

Publications

Under Peer Review

2015 **RapMap: A Rapid, Sensitive and Accurate Tool for Mapping RNA-seq Reads to Transcriptomes**, *submitted in ISMB-16*, bioRxiv, 2015.

Published

2014 **Texture-based medical image retrieval in compressed domain using compressive sensing**, *InderScience*, 2014 Vol.10, No.2.

2013 **GPU parallel implementation of B-spline non-rigid grid registration using free-form deformations**, *InderScience*, 2013 Vol.11, No.2.

2011 **Parallel Implementation of Compressed Sensing Algorithm on CUDA- GPU**, *International Journal of Computer Science and Information Security*, Vol. 9 No. 3.

Academic Projects

2015 **Clustering of RNA-seq reads without reference transcriptome**, *Department of Computer Science*, Stony Brook university, Prof. Rob Patro.

2014 **Approximate Importance Sampling Spherical Harmonics**, *Department of Computer Science*, Stony Brook university, Prof. Hong Qin.

2012 **Hybrid content based medical Image retrieval in compressed domain using Compressive Sensing**, *Graphic-era University*, India, Prof. Ankush Mittal.

2011 **Hybrid method for analysis of foot pressure images of Diabetic Mellitus subjects**, *Centre for BioMedical Engineering*, IIT-Delhi, Prof. Sneh Anand.

Graduate Courses

CSE541, *Logic in Computer Science* , Prof. Anita Wasilewska, A.

CSE528, *Computer Graphics*, Prof. Hong Qin, A-.

CSE537, *Artificial Intelligence*, Prof. I.V. Ramakrishnan, A-.

CSE548, *Analysis of Algorithms*, Prof. Rob Patro, A-.

Awards and Fellowship

2014 CS Department Chair Fellowship

2012 Best undergraduate project award

Skills

Expert C/C++, CUDA, LaTeX, MATLAB, Python

Experience BWA, BPEL, GATB, Java, OSB, Prolog, R, samtools