

# Sharath Chandra Guntuku

Multimedia Graduate Lab, N4-B2-06b, Nanyang Avenue, Singapore, 639798

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Place and Date of Birth: India, 02 April 1992

## Education

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### Nanyang Technological University (NTU)

**Singapore**

*PhD. in Computer Science, GPA – 4.7/5.0*

*Aug 2013 – present*

**Advisor:** – Prof. Lin Weisi;

**Thesis (Ongoing):** On the Role of User Factors in Modeling Affective Response to Multimedia

### Birla Institute of Technology & Science (BITS) Pilani

**India**

*B.E (Hons) in Computer Science, GPA – 8.99/10.0*

*July 2009 – May 2013*

**Advisor:** – Prof. Chittaranjan Hota

**Thesis:** Analysis and Detection of Security and Privacy Threats in P2P Networks using Machine Learning

## Experience

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### Research Intern

**Panasonic R&D, Singapore**

*Deep Learning for Facial Action Unit Recognition*

*Jan 2016 – Current*

### Graduate Teaching Assistant

**NTU, Singapore**

*Digital Logic; Java*

*Aug 2015 – Current*

### Summer Intern

**CMC Ltd., India**

*Software Development*

*May – Aug 2011*

## Coursework

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**NTU:** Computational Intelligence: Methods and Applications, Machine Learning, Social Computing, Research Methods, Human Computer Interaction, Scientific Visualization

**BITS-Pilani:** Security Analysis and Portfolio Management, Data Mining, Operations Research, Core Computer Science Modules

## Technical skills

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- **Programming Languages:** Python, Matlab, PHP, HTML, C.
- **Tools:** Caffe, Weka, AutoCAD, Minitab, WireShark, Photoshop.
- **Other Projects:** Rating Passes in Soccer Using Real-Time Spatio-Temporal Data Streams, Facial Keypoint Detection, Private Cloud Environment for Data Forensics.

## Publications

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### *Journals*

- **S.C. Guntuku**, J. T. Zhou, S. Roy, W. Lin, I. W. Tsang, "Understanding Deep Representations Learned in Modeling User 'Likes' ", IEEE Transactions on Image Processing, 2015 (accepted with minor revision) [PDF] (IF: 3.625)
- **S. C. Guntuku**, J. T. Zhou, S. Roy, W. Lin, I. W. Tsang, "Who Likes What and Why? Insights into Image based Personality Modeling", IEEE Transactions on Affective Computing, 2015 (minor revision) [PDF] (IF: 2.675)
- M.J.Scott\*, **S. C. Guntuku\***, G. Ghinea, W. Lin, "Do Personality and Culture Influence Perceived Video Quality and Enjoyment? ", IEEE Transactions on Multimedia, 2015 (accepted with minor revision) (\* – denotes equal contribution) [PDF] (IF: 2.303)
- K. Singh\*, **S.C. Guntuku\***, A. Thakur, C. Hota, "Big Data Analytics framework for Peer-to-Peer Botnet detection using Random Forests", Information Sciences, Volume 278, 10 September 2014 (\* – denotes equal contribution) [PDF] (IF: 4.038)
- A. K. Gupta, **S.C. Guntuku**, R. K. Desu, Aditya B, "Optimisation of turning parameters by integrating genetic algorithm with support vector regression and artificial neural networks", The International Journal of Advanced Manufacturing Technology, Springer London, 2014 [PDF]

### *Conferences*

- **S. C. Guntuku**, L.Qiu, S. Roy, W. Lin, V. Jakhetiya, "Do others perceive you as you want them to? Modeling Personality based on Selfies", ACM Multimedia 2015 Workshop on Affect and Sentiment in Multimedia [PDF]
- M.J.Scott\*, **S. C. Guntuku\***, Y. Huan, G. Ghinea, W. Lin, "Modelling Human Factors in Perceptual Multimedia Quality: On The Role of Personality and Culture", ACM Multimedia 2015 (\* – denotes equal contribution)
- **S. C. Guntuku**, M.J.Scott, G. Ghinea, W. Lin "Modelling the Influence of Personality and Culture on Affect and Enjoyment in Multimedia", ACII 2015 (Oral: 28% Acceptance Rate) [PDF]
- **S. C. Guntuku**, S. Roy, W. Lin, "Evaluating Visual and Textual Features for Modeling User 'Likes'", IEEE ICME, 2015.(30% Acceptance Rate) [PDF]
- **S. C. Guntuku**, M.J.Scott, Y. Huan, G. Ghinea, W. Lin, "The CP-QAE-I: A Video Dataset for Exploring the Effect of Personality and Culture on Perceived Quality and Affect in Multimedia", IEEE QoMEX, 2015. [PDF]
- **S. C. Guntuku**, S. Roy, W. Lin, "Personality Modeling Based Image Recommendation", Multi-Media Modeling. Springer International Publishing, 2015.(Oral: 36% Acceptance Rate) [PDF]
- **S. C. Guntuku**, J. T. Zhou, S. Roy, W. Lin, I. W. Tsang, "Deep Representations to Model User 'Likes'", 12th Asian Conference on Computer Vision, 2014 (Oral: 3.9% Acceptance Rate) [PDF]
- **S. C. Guntuku**, V. Nunia, Abhishek Thakur, Chittaranjan Hota, "Privacy Preserving Packet Anonymization in P2P Realm", Security and Privacy Symposium, IIT Kanpur, 2013 [PDF]

### *Under Submission*

- **S. C. Guntuku**, M.J.Scott, Y. Zhu, G. Ghinea, W. Lin, J. Redi "Quality of Experience in Multimedia - A User Factors Perspective", Feature Article in IEEE Signal Processing Magazine
- **S. C. Guntuku**, M.J.Scott, G. Ghinea, W. Lin "Personality, Culture, and System Factors - Impact on Affective Response to Multimedia", IEEE Transactions on Affective Computing

## Awards

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- **Intel Invent50**, Our idea on personalized tourist hotspot recommender system is accepted as one of the 18 finalists among 150 applications, 2015
- **ACM Travel Grant**, to present our work at ACM Multimedia, 2015
- **Nominated for Microsoft Research Asia Fellowship**, 2 students in the department, Nanyang Technological University, Singapore, 2015
- **Nanyang Engineering Doctoral Scholarship**, Nanyang Technological University, Awarded to 14 out of 100+ incoming students for graduate studies, Singapore, 2013
- **NTU Research Scholarship**, Nanyang Technological University, Singapore, 2013
- **Merit Scholarship**, Defence Research and Development Organization, India, 2010 & 2011
- **Ranked 3 in National Cyber Olympiad**, India, 2007
- **Merit Certification for 100% score in IT**, CBSE, India, 2007
- **Led a team to win 1<sup>st</sup> in State and 7<sup>th</sup> in Country for National Aerospace Olympiad**, Aeronautical Society of India, 2007
- **Best Outgoing Student**, High School, India, 2007

## Scientific Talks and Presentations

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- **Deep Representations to Model User ‘Likes’**, University Cultural Center, National University of Singapore, 2014. [Video]
- **Putting a Satellite in Moon’s Orbit: Present and Future Propulsion Systems**, Aeronautical Society of India, 2007.
- **Aryabhata to Chandrayaan - India’s Space Journey**, Defence Research and Development Laboratory, 2006. [Video]

## References

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Weisi Lin  
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Nanyang Technological University  
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Department of Computer Science  
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