

# Gangavarapu, Tushaar

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## EDUCATION

### NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA

#### UNDERGRADUATE STUDY IN INFORMATION TECHNOLOGY

Specialization: Artificial Intelligence  
2015 – 2019 | India  
Cumulative GPA: 9.7/10

### NARAYANA PU COLLEGE

#### MAJOR IN COMPUTER SCIENCE AND ENGINEERING

2013 – 2015 | India  
Percentage: 93.2%

### NSVK HIGH SCHOOL

2012 – 2013 | India  
Percentage: 97.9%

## RESEARCH INTERESTS

### COGNITIVE PSYCHOLOGY

Game-based Assessment  
Learning Sciences  
Cognitive and Affective Computing  
Social Network Analysis  
Behavioral Pattern Mining  
Computational Social Systems  
Electoral Forecasting

### HEALTHCARE INFORMATICS

Clinical Decision Support Systems  
Clinical Text Modeling  
Risk Assessment  
Population Health Analytics  
Biomedical Feature Modeling

### BIO-INSPIRED COMPUTING

Hybrid Bio-inspired Algorithms

## COURSEWORK

Data Analytics  
Deep Learning  
Web and Social Computing  
Soft Computing  
Time Series Analysis  
Parallel Computing  
(Research Asst. and Teaching Asst.)  
Computer Communications and Networking

## SKILLS

### PROGRAMMING

Python • Java • C • C++ • Bash •  
HTML, CSS, and PHP • MySQL

### FRAMEWORKS

Weka • Tensorflow • AWS • XCode •  
LaTeX • OpenGL • OpenCV • IntelliJ •  
Eclipse • NetBeans • Git

## WORK EXPERIENCE

### AMAZON.COM, INC. | MACHINE LEARNING RESEARCH ENGINEER

December 2019 – Present | India  
Enhancing readers' and publishers' experience through automated quality assistance.

### AMAZON.COM, INC. | SOFTWARE DEVELOPMENT ENGINEER

June 2019 – December 2019 | India  
Deals ranking for promotion valuation at Worldwide Deals team.

### AMAZON.COM, INC. | SOFTWARE ENGINEERING INTERN

May 2018 – Jul 2018 | India  
Accessibility and virtual assistant for Kindle Create team (Publisher Tools to Reader).

### PATTERN RECOGNITION AND MACHINE INTELLIGENCE | RESEARCH INTERN

May 2017 – Jul 2017 | India  
Gauging the amount of water required for sugarcane cultivation using ML models.

## RESEARCH EXPERIENCE

### HUMAN CENTERED RESEARCH GROUP | RESEARCHER

Jul 2017 – Present | India  
UToSMoV is a framework that unifies various theories of modeling social media.  
Publication submitted to ACM Transactions on Social Computing.

### HEALTHCARE ANALYTICS AND LANGUAGE ENGINEERING | RESEARCHER

Jul 2018 – Present | India  
TAGS and FarSight, automated systems for risk stratification as ICD-9 prediction.  
Published at NLDB 2019, CoDS-COMAD 2020, CoNLL 2019, and Knowledge-Based Systems, Elsevier; submitted to Emerging Topics in Computing, IEEE Transactions.

### BIOMEDICAL FEATURE ENGINEERING | RESEARCHER

Aug 2018 – Present | India  
A novel hybrid greedy ensemble, optimized using GA to reduce the dimensionality of biomedical datasets. Published at Applied Soft Computing, Elsevier.

### HUMAN CENTERED RESEARCH GROUP | RESEARCHER

Jul 2017 – Present | India  
Development and assessment of GAMVR, a cost-effective VR game to teach maths to children. Publication submitted to Learning Technologies, IEEE Transactions.

## SCIENTIFIC ACTIVITIES

2020	Amazon	Founder, machine learning reading group
2020	NITK	Guest lecture on feature selection for biomedical data
2020	NITK	Guest lecture on cognitive and affective assessments
2020	FICTA	Special Session on Healthcare Analytics (HeAL)
2019	NITK	Guest lecture on social media based predictive analytics (IT752)
2019	NITK	Guest lecture on game-based learning and assessment (IT352)
2019	NITK	Expert talk on social media applications, PAA workshop
2017	NITK	Computer Communications and Networking (IT251), TA
2016	NITK	ML mentor, winter mentorship, Web Enthusiasts' Club

## SOCIETIES AND GROUPS

2019	International	SIG on Natural Language Learning (ACL SIGNLL), Member
2019	International	Association for Computational Linguistics (ACL), Member
2016	International	Intel Artificial Intelligence, Student Ambassador
2016	International	CodeNation, Student Ambassador
2016	National	Institution of Engineers, Executive Member
2016	NITK	Web Enthusiasts' Club, Executive Member
2015	International	IEEE, Student Member