# Gangavarapu, Tushaar

# Homepage | LinkedIn | ResearchGate | Google Scholar | Orcid

#### **FDUCATION**

# 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.)

(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 • LETEX • 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 2020	Amazon NITK	Founder, machine learning reading group 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

International

NITK

2016

2015

		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

IEEE, Student Member

Web Enthisiasts' Club, Executive Member