## VANDIT GAJJAR

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## **EDUCATION**

## School of Computer Science, The University of Adelaide

Adelaide, AUS

Master of Computing and Innovation

July 2019 - Present

GPA: 6.00 / 7.00

L. D. College of Engineering (LDCE)

Ahmedabad, IN

Bachelor of Engineering in Electronics and Communication

June 2014 - June 2018

GPA: 8.22 / 10.00

## RESEARCH INTERESTS

Computer Vision, Deep Learning, Software Development

#### WORK EXPERIENCE

## The University of Adelaide

Adelaide, SA

 $Course\ Ambassador$ 

March 2020 - Present

Working with the Learning and Innovation Center on helping the professors for concern regarding remote learning activities, provide insightful engagement matrices for the courses from the raw data, and use visualization techniques for effective modeling.

AI Australia Sydney, NSW

Data Analyst Intern

September 2020 - December 2020

Working with the AI Consulting team on Computer Vision and Deep Learning projects - Aerial Dense Object Detection where the goal is to detect several objects from high-resolution satellite images and BBI AI in which the goal is to develop an application for predicting height and waist from input image data.

## School of Engineering and Applied Science, Ahmedabad University

Ahmedabad, IN

Research Assistant

July 2018 - December 2018

Deep Learning for Person Retrieval in Surveillance Video using Semantic Description. Published at IEEE AVSS 2018. (Project funding agencies: Board of Research in Nuclear Science (BRNS), Bhabha Atomic Research Centre (BARC), Department of Atomic Energy, Government of India).

## Meditab Software Inc.

Ahmedabad, IN

Software Development Engineer Intern (Artificial Intelligence)

March 2018 - June 2018

Designed a Computer Vision based system for Medical Pill Detection and Segmentation. Created a dataset of more than 8000 images consisting different Medical Pill categories, annotated manually, and fine-tuned Mask R-CNN for accurate results.

## AWARDS AND ACHIEVEMENTS

- Outstanding Reviewer: Asian Conference on Computer Vision (ACCV) 2020
- The 2019 University of Adelaide Global Citizens Scholarship for postgraduate studies to demonstrate an understanding of, and commitment to, global citizenship.
- Outstanding Teaching Assistant Award Ahmedabad University for Advanced Statistics, Computer Vision and Machine Learning courses.
- 3rd place in Semantic Person Retrieval in Surveillance using Soft Biometrics in Conjunction with IEEE International Conference on Advanced Video and Signal-based Surveillance (AVSS), 2018.
- Design and Technology Manager Award for excellent managerial performance for GTU Central Techfest 2017.

- Languages: Python, C++, Java
- Frameworks: TensorFlow, PyTorch, NumPy, Pandas, Scikit-Learn, Open CV
- Version Control: Git, SVN
- Web Development: HTML, CSS
- AWS Certification: Certified Cloud Practitioner, Certified Developer Associate
- Soft: Conflict Management, Effective Communication, Logical and Critical Thinking, Team Planning

#### RELEVANT COURSES

#### **Graduate Coursework**

- Algorithms and Data Structure Analysis Artificial Intelligence Computer Systems Computer Vision
- Computer Networks and Applications Foundations of Computer Science Introduction to Statistical Machine Learning Operating Systems Software Engineering and Project

#### Selected Undergraduate Coursework

 $\bullet$  Advanced Microprocessors  $\bullet$  Computer Programming and Utilization  $\bullet$  Digital Signal Processing  $\bullet$  Data Communication and Networking  $\bullet$  Fundamentals of Image Processing  $\bullet$  Microprocessor Interfacing  $\bullet$  Micro-controller Interfacing  $\bullet$  VLSI

#### COMPETITIONS

## Google Kick Start

Round D 2020

#### **PUBLICATIONS**

#### PeR-ViS: Person Retrieval in Video Surveillance using Semantic Description

IEEE/CVF Winter Conference on Applications of Computer Vision Workshops (WACVw) 2021 (Oral)
P. Shah, A. Garg, V. Gajjar

# SAF- BAGE: Salient Approach for Facial Soft-Biometric Classification - Age, Gender, and Facial Expression

IEEE Winter Conference on Applications of Computer Vision (WACV) 2019 (Oral)

A. Gurnani, K. Shah, V. Gajjar, V. Mavani, Y. Khandhediya

## Person Retrieval in Surveillance Video using Height, Color and Gender

IEEE International Conference on Advanced Video and Signal-based Surveillance Workshops (AVSSw) 2018 (Oral)

H. Galiyawal, K. Shah, V. Gajjar, M. Raval

## ViS-Hud: Using Visual Saliency to Improve Human Detection with Convolutional Neural Networks

IEEE Computer Vision and Pattern Recognition Workshops (CVPRw) 2018

V. Gajjar, Y. Khandhediya, A. Gurnani, V. Mavani, M. Raval

## Human Detection and Tracking for Video Surveillance: A Cognitive Science Approach

IEEE International Conference on Computer Vision Workshops (ICCVw) 2017

V. Gajjar, A. Gurnani, Y. Khandhediya

#### Hand Gesture Real Time Paint Tool-Box

IEEE International Conference on Power, Control, Signal and Instrumentation Engineering 2017

V. Gajjar, V. Mavani, A. Gurnani

## Human Detection for Night Surveillance using Adaptive Background Subtracted Image

National Conference on Advances in Computer Science Engineering and Technology 2017

Y. Khandhediya, K. Sav, V. Gajjar

#### MAT502: Advanced Statistics

Ahmedabad University

Teaching Assistant

Winter 2019

Conducted weekly office hours to help students with concepts.

## CSC105: Introduction to Computation and Programming Lab

Ahmedabad University

Teaching Assistant

Winter 2019

Responsibilities included teaching discussion session 1 hour/week, teaching a lab session 3 hours/week, and grading exams.

## CSC523: Machine Learning

Ahmedabad University

Teaching Assistant

Winter 2019

Assisted in creating theory and coding assignments. Conducted weekly office hours to help students with homework and concepts.

## CSP 502: Computer Vision

Ahmedabad University

Teaching Assistant

Fall 2018

Conducted weekly office hours to help students with homework and concepts.

### CSP 200: Signals and Systems

Ahmedabad University

Teaching Assistant

Fall 2018

Responsibilities included creating assignments, teaching discussion session 1 hour/week, teaching a tutorial session 4 hours/week, and grading assignments.

## CSC 331: Computer Networks Lab

Ahmedabad University

Teaching Assistant

Fall 2018

2019

Responsibilities included teaching a lab session 2 hours/week, and grading assignments. Conducted weekly office hours to help students with assignments.

#### PROFESSIONAL ACTIVITIES

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International Conference on Learning Representations (ICLR)	2021
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)	2020, 2021
European Conference on Computer Vision (ECCV)	2020
IEEE/CVF International Conference on Computer Vision (ICCV)	2019
AAAI Conference on Artificial Intelligence (AAAI)	2020, 2021
International Conference on Machine Learning (ICML)	2020, 2021
IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)	2020, 2021
Asian Conference on Computer Vision (ACCV)	2020

## Volunteering

Neural Information Processing Systems (NeurIPS)	2020
International Conference on Machine Learning (ICML)	2020
International Conference on Learning Representations (ICLR)	2020
South Australian State Emergency Service (SA SES)	2020

#### Professional Membership

Australian Computer Society (ACS)	2020
Computer Vision Foundation (CVF)	2017

#### INVITED TALKS

- SAF- BAGE: Salient Approach for Facial Soft-Biometric Classification Age, Gender, and Facial Expression, at Workshop on Demographic Variations in Performance of Biometric Algorithms in conjunction with IEEE WACV
- Workshop on Machine Learning using Python in Tensorflow, at Ingenium, Ahmedabad University

## MEDIA COVERAGE

New Scientist, Digital Trends, The Next Web, Tech The Lead, IMPORT AI by Jack Clark, Business Recorder, RT

Last updated: December 12, 2020