

# Arun Ponnusamy

## Computer Vision Research Engineer

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### Arun Ponnusamy

Visakhapatnam, India.

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[github.com/arunponnusamy](https://github.com/arunponnusamy)

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### Skills

Passionate about Image Processing, Computer Vision and Machine Learning.

Key skills - C/C++, Python, Keras, TensorFlow, PyTorch, OpenCV, dlib, Flask, OpenCL, CUDA, Matlab/Octave, Assembly/Intrinsics, CMake, Make, Git, Linux CLI.

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### Experience

(5 years)

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#### care.ai

Computer Vision Research Engineer

JAN 2019 - PRESENT, VISAKHAPATNAM

*Key areas worked on* - image classification, object detection, action recognition, face detection and face recognition for edge devices.

*Tools and technologies* - TensorFlow/Keras, TensorFlow Lite, TensorRT, OpenCV, dlib, Python, Google Cloud.

*Devices* - Nvidia Jetson Nano / TX2, Google Coral Edge TPU.

#### 1000Lookz

Senior Computer Vision Engineer

JAN 2018 - JAN 2019, CHENNAI

*Key areas worked on* - head pose estimation, face analysis, image classification and object detection.

*Tools and technologies* - TensorFlow/Keras, OpenCV, dlib, Flask, Python, AWS, Google Cloud.

#### MulticoreWare Inc.

Software Engineer

JULY 2014 - DEC 2017, CHENNAI

*Key areas worked on* - image processing, computer vision, parallel processing, software optimization and porting.

*Tools and technologies* - OpenCV, dlib, C/C++, OpenCL, CUDA.

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### Education

PSG College of Technology / Bachelor of Engineering

JULY 2010 - MAY 2014, COIMBATORE

Bachelor's degree in **Electronics and Communication Engineering** with CGPA of **8.42** (out of 10).

Favourite subjects - Digital Electronics, Embedded Systems and C Programming.

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## Notable Efforts

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Served as one of the Joint Secretaries of Institution of Engineers(I) (students' chapter) of PSG College of Technology.

Secured first place in Line Tracer Event in Kriya '13, a Techno management fest conducted by Students Union of PSG College of Technology.

Actively participated in FIRST Tech Challenge, a robotics competition, conducted by Caterpillar India.

Official writer at [Towards Data Science](#) (online publication) covering Computer Vision and Machine Learning.

Technical reviewer for the books [Mastering OpenCV 4](#), [Mastering OpenCV 4 with Python](#), [OpenCV 4 for Secret Agents](#) published by Packt.

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## Courses & Certifications

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[Practical Deep Learning for Coders - Part 1 \(2018\)](#) from [fast.ai](#), taught by *Jeremy Howard* and *Rachel Thomas*.

[Convolutional Neural Networks](#) from [deeplearning.ai](#) taught by *Prof. Andrew Ng*.

[Machine Learning](#) from [Stanford University](#) taught by *Prof. Andrew Ng*.

[Heterogeneous Parallel Programming](#) from [University of Illinois](#), taught by *Prof. Wen-Mei Hwu*.

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## Personal Projects

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### cvlib

A simple, high level, easy-to-use open source computer vision library for Python. (published as a pip installable python package)

[cvlib.net](#)

### Computer Vision Blog

A blog on image processing / computer vision / machine learning with simple and accessible posts with source code and intuitive explanations.

[arunponnusamy.com](#)

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## Public Speaking

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Delivered a talk on "Generative Adversarial Networks (GAN)" at [Chennai School of AI Meetup](#) as an invited speaker.

Organized and gave a talk on "Learning Roadmap for CV & ML" at [Computer Vision and Machine Learning Meetup - Chennai](#).

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## Interests

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Reading, writing, watching sensible movies, watching educational videos on YouTube, doing interesting MOOCs, listening to music and podcasts, exploring new places.