

Curriculum Vitae



- Name** : M. SRIDEVI
- Designation** : Assistant Professor (Grade – I)
- Office Address:** Department of CSE,
National Institute of Technology,
Tiruchirappalli - 620015.
- Telephone** : 04312503216
- Email** : msridevi@nitt.edu
- Field(s) of Specialization:** Computer vision & Image Processing, Computer graphics, Parallel Processing, Soft computing Techniques, Machine & Deep Learning

7. Employment Profile

Job Title	Employer	From	To
Assistant professor	NIT, Trichy	03.12.2008	Now
Lecturer	Sastra University, Thanjavur	01.06.2007	06.10.2007
Lecturer	Sri Venkateswara College of Engineering, Sriperumbudur, Chennai	06.07.2006	30.4.2007

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	NIT, Tiruchirappalli	2015		Image Processing
M.E	Annamalai University	2006	I class with Distinction	Computer Science
B.E.	Annamalai University	2004	I class	Information Technology
12 th	State Board	2000	I class	Maths and Science

9. Academic/Administrative Responsibilities within the University

- Girls hostel warden (2018 to 2021)
- Core Faculty Member - Centre of Excellence in Artificial Intelligence (2020, 2021)
- Dept. Industrial Lecture Coordinator (Jan 2021 – June 2021)
- Dept. Online course Coordinator (Jan 2021 – June 2021)
- Event Coordinator, International Women’s day celebration (2021)
- Help desk management, CSAB (2019)
- Accommodation Coordinator for Smart India Hackathon (2019)
- Hospitality committee for Smart India Hardware Hackathon (2018)
- Department BoS Coordinator (2018 to 2021)
- Faculty advisor for Delta club (2017 to 2021), NITTFEST (2020),Festember (2020, 2021) and UG & PG CSE students
- NBA Work (2009,2010,2011,2012,2021)
- Convocation Duty (2009 to 2021)
- M.Tech, M.Tech QIP, MS and Ph.D Admission Committee member(2009, 2010, 2011,2012,2013,2014,2015,2016,2020)
- B.Tech Project Committee Member (2010, 2021)
- M.Tech Project Committee Member (2014,2018)
- Department Imprest Handling (2015 to 2021)
- Time Table Preparation (Jan 2009, July 2009, July 2010, July 2012, Jan 2015, Jan 2019)
- Stock Verification officer – Central stores (2015,2018)
- Laboratory development - Initiating Faculty for Purchase of Lab equipments
- Establishment of New Laboratory – Software Development Lab, High Performance computing Lab.

10. Academic/Administrative Responsibilities outside the University

- Teaching Assistant for a workshop on “Introduction to Research Methodolgy, Conducted by IIT, Bombay (2012)
- Assessment Committee Member for “State Level Skill Summit Competition “, Held at Ramya Sathianathan Polytechnic College, Pudupatti. (2017)
- Handled classes for M.Tech.(2016) & B.Tech. (2019, 2020, 2021) for IIIT, Tiruchirappalli
- Stock verification officer, IIIT, Tiruchirappalli (2017)
- Attended two weeks special training in IIT Madras (2018)
- Training on “AI and Implementation of AI” for HAPP, OFT, Trichy (2019)
- Judge for Smart India Hackathon organized by MHRD (2019)

11. Awards, Associate ships etc.

- Japan Science and Technology (JST) Award as Sakura Science Exchange Program participant for Tokyo visit in the year 2020.
- Best performer award 2020 under the Assistant Professor Grade I category recognized by NIT Tiruchirappalli.
- Best Paper award at 5th International Conference on Advanced Computing, Networking and Informatics, 2018 for the paper titled “Fast Feature Extraction on Graphic Processing Unit for a Video Sequence”.
- Faculty award for sponsored research projects 2017 recognized by NIT Tiruchirappalli.

12. Fellowships

- TiHAN Faculty Fellowship award 2021 supported by NMICPS Technology Innovation Hub on Autonomous Navigation Foundation - IIT Hyderabad.

13. Details of Academic Work

- Involved in Curriculum Development and establishment of laboratories
- 1 student completed MS (By research) under my guidance
- Projects guided at Undergraduate and Postgraduate levels
- Courses taught at Undergraduate, Postgraduate, Ph.D. levels :
Image Processing, Computer Graphics, Parallel Processing, System Programming, Numerical Computing, Operating Systems, Augmented and Virtual Reality, Discrete Structures, Advanced DBMS, Data Structures, Combinatorics and Graph Theory, Basics of Programming, Logical foundation for Computer science.
- Handled orientation class for 1 year students
- Offered open elective courses

14. Details of R&D Projects

Sponsored Projects

S. No.	Name of the project	Role	Sponsoring agency	Period	Amount (Rs. in Lakhs)
1.	Design and development of ICT-enabled cloud based mobile application for the self-promotion of products developed by self-help groups	Co - PI	DST	January 2018 – January 2020	27.2
2.	Design and Development of Linux Software Development Kit optimized for e6500 processor architecture	PI	DRDO	September 2019 – June 2021	9.6347

Consultancy Projects

S. No.	Title of the work	Agency	Period of the work	Amount (Rs. in lakhs)
1	E-velocity	Fidelity Business Services India, Bangalore	November 2019 – December 2020	8.26

2.	Study and establishing the design guidelines for the real time CAN communication for BHEL E – bus	BHEL ,Tiruchirappalli	December 2019 – May 2020	24.426
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15. Number of PhDs guided : 1

Ongoing: 5

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars etc.

Date (s)	Title of Activity	Level of Event (International/ National/Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter)	Event Organized by	Venue
June 29 to July 4, 2009	Summer Term Course on Program Optimization for Multicore Architecture	National	Participant	Dept. of CSE	IIT, Kanpur
12 Dec., 2011	ACM ICPC Asia Amritapuri Multisite Regionals	International	Coach - Participant	Amrita Vishwa Vidyapeetham, Amritapuri	Amrita Vishwa Vidyapeetham, Amritapuri
Dec. 20 – 22, 2011	International conference on soft computing for Problem Solving	International	Presenter	IIT, Roorkee	IIT, Roorkee
January 9– 13, 2012	Short term course on Introduction to Forensic Engineering and Failure Analysis	International	Participant	CEA, NITT and University of North Carolina, USA	NITT
Feb 18 – 19, 2012	ISTE workshop on Writing Effective Conference Papers	National	Participant	IIT Bombay	Remote center SASTRA University, Tanjore

February 29 - March 2, 2012	QIP sponsored Workshop on Engineering Optimization using MATLAB & EXCEL	National	Participant	IIT, Guwahati	IIT, Guwahati
25-27 May, 2012	2 nd International conference on computer science, Engineering and Applications	International	Presenter	Delhi	Delhi
8 th June 2012	Workshop on Support Vector Machines	National	Participant	NITT	NITT
25 th June - 4 th July 2012	ISTE Workshop on Introduction to Research Methodologies	National	Teaching Assistant	IIT Bombay	Remote center NITT
July 5 – 6, 2012	Workshop on Technical Paper Presentation using LATEX software	National	Participant	NITT	NITT
October 5 – 7, 2012	Workshop on Nuances of Support Vector machines	National	Participant	MBA dept.	NITT
28 – 29 April 2015	TEQIP Sponsored Conclave on Academic Reforms	National	Participant	NITT	NITT
8 – 13 Aug, 2016	Workshop on Data National Analytics concepts and techniques for business intelligence	National	Participant	CSE and MBA Dept.,	NITT

02 March, 2017	Workshop on Training of FPGA based image encryption kit	National	Participant	CSE Dept.	NITT
31 st March – 1 st April, 2017	International Conference on Frontiers in engineering, Applied Sciences & technology	International	Review & Session Chair	MCA Dept. NITT	NITT
4-9, Dec., 2017	Capacity building of Women Managers in higher Education	National	Participant	NITT	NITT
27- 28 April, 2017	2 nd International Conference on Frontiers in engineering, Applied Sciences & technology	International	Review & Session Chair	MCA Dept. NITT	NITT
28 – 30 Dec, 2018	Introduction to Machine Learning and Deep Learning with applications to Engineering systems	National	Participant	CEP office, IITB	IIT, Bombay
23 – 25 April , 2019	Advanced Techniques in Deep learning	National	Participant	CEP office, IITB	IIT, Bombay
6 Aug, 2019	AI from the Data center to the edge – An optimized path using Intel Architecture	National	Participant	CSE, NITT	NITT
11 -15, May 2020	AIP on E – Content Development	National	Participant	NITT	Online

19 – 21 Dec., 2020	Predictive Analytics and Predicative Maintenance with Engineering Applications	National	Participant	CEP office, IITB	IIT, Bombay (Online)
04 – 06, Feb. 2021	A study on detection of copy – move forgery in digital images	International	Presenter	3 rd International Conference on Intelligent communication technologies and Virtual Mobile Networks	Tirunelveli

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convener / Co-Convener)

S.No.	Type	Title	Period	Coordinators
1.	Workshop	Artificial Intelligence and Machine Learning Technique for Data Analytics	15.02.2021 – 19.02.2021	Dr. Domnic, Dr. E. Sivasankar Dr. M. Sridevi
2.	ED programme	Self Promotion of SHG products through Thirumathikart	17.02.2020 – 21.02.2020	Dr. M. Brindha, Dr. M. Sridevi, Dr. N. Sivakumaran
3.	International Conference	First International Conference on Secure Reconfigurable Architectures and Intelligent Computing (SRAIC 2019)	28.11.2019 – 30.11.2019	Dr. N Ramasubramanian, Dr. Rajeswari Sridhar, Dr. M. Sridevi Dr. M. Brindha Dr.B. Shameedha Begum
4.	Workshop	Capacity Building of Women Faculty in Higher Education	9.12.2019 – 14.12.2019	Dr. R. Gandhimathi, Dr. P. Sridevi, Dr. M. Sridevi
5.	Faculty Development Programme	Computational Intelligence for Multimedia	13.05.2019 – 17.05.2019	Dr. M. Brindha, Dr. M. Sridevi, Dr. E. Sivasankar
6.	Training	Computer Trainig for the Police Personnel	13.06.2018 – 24.06.2018	Dr. S. Selvakumar, Dr. M. Sridevi, Dr. M. Brindha, Dr. Kunwar Singh, Dr.Shameedha Begum
7.	Short Term Course	Basics of Programming	11.11.2017 – 15.11.2017	Dr. B. Nithya, Dr. M. Brindha, Dr. M. Sridevi

8.	Short Term Course	Introduction to cryptography	01.11.2017 – 05.11.2017	Dr.Kunwar Singh, Dr. E. Sivasankar, Dr. M. Sridevi
9.	Short Term Course	Introduction to Soft Computing	26.10.2017 – 30.10.2017	Dr. M. Sridevi, Dr. M. Brindha, Dr. E. Sivasankar
10.	Short Term Course	Learning Computer skillset	20.10.2017 – 24.10.2017	Dr. M. Brindha, Dr. M. Sridevi, Dr.B. Nithya
11.	National Conference	National Workshop of Cryptology (NWC 2017)	28.08.2017 – 30.08.2017	Dr. C. Mala, Dr. Kunwar Singh, Dr. M. Sridevi, Dr.B. Nithya
12.	Workshop	Introduction to Cryptology	30.05.2016 – 04.06.2016	Dr. C. Mala, Dr. Kunwar Singh Dr. M. Sridevi

18. Invited Talks delivered

Topic	Date	Organization
Operating Systems	15.04.2016	MRK Institute of Technology, Kattumannarkoil.
Computer Graphics	25.07.2016	Kings College of Engineering, Tanjore.
Data Structures	11.06.2019	The Institute of Engineers (India), Tiruchirappalli
Computational Intelligence for Multimedia	12.07.2019	Shanmuganathan Engineering College, Pudukkottai
Introduction to Machine Learning and its algorithm	21.09.2020	Vellalar College of Engineering and Technology
Management Development Program on E-content Development	24.02.2021 – 26.02.2021	NLC India Limited, Neyveli
Machine Learning – Concepts and Applications	19.04.2021	NIT, Tiruchirappalli
Role of AR & VR in real time applications	07.06.2021 to 11.06.2021	Karunya Institute of Technology and Science
Neural Networks and its application	27.07.2021	Faculty Training Centre, GCT, Coimbatore
Machine Learning Techniques	10.11.2021	Muthayammal Engineering College, Rasipuram

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization
Life Member	Computer Society of India (CSI)
Member	IEEE
Life Member	IEI

20. Academic Foreign Visits :

- Tokyo visit in the year 2020 under Sakura Science Exchange Program, Japan Science and Technology (JST).

21. Publications

(A) Refereed Research Journals:

1. Mala, C. and M. Sridevi (2014) Color Image Segmentation using Hybrid Learning Techniques. IT Convergence Practice, ISSN: 2288–0860,2(2), 21–42.
2. Sridevi, M., C. Mala and Siddhant Sanyam (2015) Optimised Template Matching Technique in parallel environment with exhaustive search and swarm intelligence. International Journal of Parallel, Emergent and Distributed Systems, Taylor and Francis ISSN: 1744-5760, 30 (2), 118–134.
3. Mala, C. and M. Sridevi (2016) Multilevel Threshold Selection for image segmentation using Soft Computing Techniques. Soft Computing, Springer, Volume 20, Issue 5, pp 1793–1810.
4. Biji Nair, M.Sridevi, C. Mala, and Lakshmi Prabha S (2016) Privacy Preserving Task Force Communication in Hastily Formed Networks through ACT. Open access Journal Research Brief on Information & Communication Technology Evolution (ReBICTE), Vol. 2, Article No. 5, pp. 1- 11.
5. M.Sridevi, C.Mala (2019) Self Organizing Neural Networks for Image Segmentation based on Multiphase Active Contour, Neural Computing and Applications, Springer, Vol. 31(2), pp. 865 – 876.
6. Madichetty Sreenivasulu and M. Sridevi (2019) Disaster damage assessment from the tweets using the combination of statistical features and informative words, Social Network Analysis and Mining, Springer, vol. 9(1), pp. 42
7. Sreenivasulu Madichetty and M. Sridevi (2020) Comparative study of statistical features to detect the target event during disaster, Big Data Mining and Analytics, IEEE, Vol. 3, (2), pp. 121-130.
8. Madichetty Sreenivasulu and M. Sridevi (2020) Identification of Medical Resource tweets during disaster using Majority Voting based Ensemble Method, Social Network Analysis and Mining, Springer, Vol. 10(1), pp. 1 – 18.
9. Sreenivasulu M and Sridevi (2020) Classifying Informative and Non-informative Tweets from the Twitter by Adapting Image features during Disaster, Multimedia Tools and Applications, Springer, Vol. 79 (39) , pp. 28901-28923.
10. Sreenivasulu Madichetty and Sridevi Muthukumarasamy (2020), Detection of situational information from Twitter during disaster using deep learning models, Sadhana Journal, Vol. 45 (1), pp. 1- 13.

11. Sreenivasulu Madichetty and M. Sridevi (2021) A stacked convolutional neural network for detecting the resource tweets during a disaster, *Multimedia tools and applications*, Springer, Vol. 80 (3), pp. 3927-3949.
12. Sreenivasulu Madichetty, Sridevi Muthukumarasamy and P Jayadev (2021) Multi-modal classification of Twitter data during disasters for humanitarian response, *Journal of Ambient Intelligence and Humanized Computing*, Springer, DOI <https://doi.org/10.1007/s12652-020-02791-5>.
13. Sreenivasulu Madichetty and M Sridevi (2021) A novel method for identifying the damage assessment tweets during disaster, *Future Generation Computer Systems*, Vol. 116, pp. 440-454.
14. Sreenivasulu Madichetty and M Sridevi (2021) A Neural-Based Approach for Detecting the Situational Information From Twitter During Disaster, *IEEE Transactions on Computational Social Systems*, doi: 10.1109/TCSS.2021.3064299.

(B) Conferences/Workshops/Symposia Proceedings

1. Narendran Rajagopalan, C. Mala, M.Sridevi, R. Hari Prasath “Optimized Channel Allocation Using Genetic Algorithm and Artificial Neural Networks” - International Conference on Soft Computing for problem Solving (SocPros – 2011), *Advances in Intelligent and Soft Computing* (Springer), Vol. 130, 2012, pp. 645 – 655.
2. M.Sridevi, C.Mala, Siddhant sanyam, “Comparative Study of Image Forgery and Copy-Move Techniques” , Second International Conference on Computer Science, Engineering and Applications (ICCSEA – 2012), *Advances in Intelligent and Soft Computing* (Springer), Vol. 166, 2012, pp 715-723.
3. M.Sridevi, C.Mala and S.Sandeep, “Copy – move image forgery detection in a parallel environment” – International Workshop on Signal Image Processing and Multimedia (SIPM - 2012), *Computer Science Conference Proceedings in Computer Science & Information Technology (CS & IT) series* Vol. 06, 2012, pp. 19–29.
4. M.Sridevi and C.Mala (2012), “A survey on monochrome image segmentation methods” - 2nd International Conference on Communication, Computing & Security [ICCCS-2012] , *Procedia Technology* (Elsevier), vol. 6 , pp. 548 – 555.
5. S. Umaa Mageswari, M. Sridevi and C.Mala (2013) An experimental study and analysis of different image segmentation techniques. *International conference on design and manufacturing*, *Procedia Engineering*, Elsevier, vol. 64, pp. 36 – 45.
6. Mala, C. and M. Sridevi (2014) Parallel Algorithms for Edge detection in an Image. 17 th International Conference on Network-Based Information Systems, Salerno, IEEE Conference proceedings, 23–30.
7. Sridevi M, C.Mala and E.Sivasankar (2014) Optimized Multilevel Threshold Selection using Evolutionary Computing. 17 th International Conference on Network-Based Information Systems, Salerno, IEEE Conference proceedings 149– 156.
8. M.Sridevi, C. Mala, and Lakshmi Prabha S (2016) A Discrete Wavelet Transformation based fast and secure transmission of images for group communication. *Proceedings of MobiSec in Springer CCIS series*.
9. Madichetty Sreenivasulu and M Sridevi (2017) A Surey on event detection methods on various social media. 5th International Conference on Advanced Computing, Networking, and Informatics, NIT, GOA, Accepted for publication in Springer.
10. Dongra Pavan and M.Sridevi (2017) A novel method for semi transparency effect in academic videos. 8th International Conference on Computing Communication and Networking Technologies, publication in *IEEE Xplorer*, pp. 1- 5.

11. M. Sridevi ; N. Sankaranarayanan ; Ankit Jyothish ; Aditya Vats ; Milind Lalwani (2017) Automatic traffic sign recognition system using fast normalized cross correlation and parallel processing, International Conference on Intelligent Communication and Computational Techniques (ICCT), IEEE publisher, pp. 200 -204.
12. M Sridevi (2017), Image segmentation based on multilevel thresholding using firefly algorithm, International Conference on Inventive Computing and Informatics , IEEE publisher, pp. 750-753.
13. M. Sridevi, Vishnu Balakrishnan, Janardhan J. Kammath, Sherine Davis (2017) Enhanced Parallel Image Retrieval Technique Using Relevance Feedback. International Conference on Computing Analytics and Networking, Published in Progress in Computing, Analytics and Networking part of Advances in Intelligent Systems and Computing, Springer, vol 710, pp. 593-600 .
14. Sreenivasulu Madichetty, and M. Sridevi (2017) Mining informative words from the tweets for detecting the resources during disaster, International Conference on Mining Intelligence and Knowledge Exploration, Springer, pp. 348-358.
15. Madichetty Sreenivasulu, and M. Sridevi (2018) Re-Ranking Feature Selection Algorithm for Detecting the Availability and Requirement of Resources Tweets during Disaster, International Journal of Computational Intelligence & IoT vol. 1(2).
16. Sreenivasulu Madichetty, and M. Sridevi (2018) A survey on event detection methods on various social media, 5th International Conference on Advanced Computing, Networking, and Informatics, published in Recent Findings in Intelligent Computing Techniques, Springer, pp. 87-93.
17. Krunal Randive and M. Sridevi (2018) Fast Feature Extraction on Graphic Processing Unit for a Video Sequence. 5th International Conference on Advanced Computing, Networking, and Informatics, published in Recent Findings in Intelligent Computing Techniques, Springer, pp. 481-488.
18. Dongare P., Sridevi M. (2018) Semitransparency Effect in a Video Using Deep Learning Approach, International Conference on Advances in Computing and Data Science, Advances in Computing and Data Science, part of Communications in Computer and Information Science, Springer, vol 906. pp 564-573.
19. Madichetty Sreenivasulu, and M. Sridevi (2019) Detecting informative tweets during disaster using deep neural networks, 11th International Conference on Communication Systems & Networks (COMSNETS), IEEE, pp. 709-713.
20. M Sridevi, S Aishwarya, Amedapu Nidheesha and Divyansh Bokadia (2019), Parallel Image Forgery Detection Using FREAK Descriptor, Information and Communication Technology for Intelligent Systems, Smart Innovation, Systems and Technologies, vol 107, pp. 619-630.
21. S. P. Singhal and M. Sridevi, (2019) Comparative study of performance of parallel alpha Beta Pruning for different architectures, 9th International Conference on Advanced Computing (IACC), IEEE , pp. 115-119.
22. Bharathi A, Sridevi M (2019) A Survey on Human Action Recognition in a Video Sequence, ICDLAIR , Lecture notes in networks and systems, Springer, pp. 82 – 93.
23. Singhal S.P., Sridevi M., Sathya Narayanan N., Shankar Raman M.J. (2020) Porting of eChronos RTOS on RISC-V Architecture, Advances in Communication and Computational Technology, Lecture Notes in Electrical Engineering, Springer, vol 668, pp 1269-1279
24. Madichetty Sreenivasulu, and M. Sridevi (2020) Improved Classification of Crisis-Related Data on Twitter using Contextual Representations, Procedia Computer Science, Elsevier, vol. 167, pp. 962-968.
25. M Sridevi, Mayuri Kharde (2020) Video Summarization Using Highlight Detection and Pairwise Deep Ranking Model , Procedia Computer Science, Elsevier, vol. 167, pp. 1839-1848.

26. Vindusha Pankajakshan, M. Sridevi (2020) Detecting Duplicate Question Pairs Using GLoVe Embeddings & Similarity Measures, International conference on Automation, Signal processing and Instrumentation and control (iCASIC 2020), Springer proceedings, pp. 695-702.
27. Shashank R, M. Sridevi (2021) Text Emotion Classification using stacked CNNs and LSTMs, International conference on Automation, Signal processing and Instrumentation and control (iCASIC 2020) , Springer proceedings, pp. 717-724.
28. Rachel Selva Dhanaraj and M Sridevi (2021), A study on detection of copy-move forgery in digital images, Third International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV), IEEE, pp. 900-905.
29. Rachel Selva Dhanaraj and M Sridevi (2021), An Efficient Technique to Extricate Keypoints from a digital image, First International Conference on Advances in Smart Sensor, Signal Processing and Communication Technology (ICASSCT 2021), Journal of Physics: Conference Series, Vol. 1921(1), pp. 012068
30. Sridevi M, Naseem Shaik, Anjali Gupta and Surya Chaitanya M B (2021) Restoration of Deteriorated Line and Color Inpainting, International Conference on Computational Intelligence (ICCI 2020), Accepted for publication in Springer
31. Sugirtha T and Sridevi M (2021) A Survey on Object Detection and Tracking in a Video Sequence, International Conference on Computational Intelligence (ICCI 2020), Accepted for publication in Springer.

(C) Book Chapters

1. K Martin Sagayam, P Malin Bruntha, M Sridevi, M Renith Sam, Utku Kose and Omer Deperlioglu (2021), A cognitive perception on content-based image retrieval using an advanced soft computing paradigm, Book on Advanced Machine Vision Paradigms for Medical Image Analysis, (Chapter 7), Academic Press, pp. 189 – 211.
2. Sridevi M, Sugirtha T, Ravi Kiran and Senthil Yogamani (2021), Localization and Mapping for Autonomous Driving, Book on Autonomous driving and driver assistance (ADAS): Applications, Development, Legal Issues, (Chapter 20), CRC Press, pp. 411- 431.
3. Sridevi M, Sugirtha T, Hazem Rashed, Ravi Kiran and Senthil Yogamani (2021), CNN based object detection, tracking and trajectory prediction for autonomous driving, Book on Autonomous driving and driver assistance (ADAS): Applications, Development, Legal Issues, (Chapter 4), CRC Press, pp. 106 -126.