KLEF Deemed to be University

DEPARTMENT OF ECE REPORT ON SIL EVENT CONDUCTED BY TEACH A MACHINE CLUB

Open CV_Series 3: Face Detection

Date-19/01/24

Venue-R204



FACULTY IN-CHARGES

Dr.E.KIRAN KUMAR Dr.P.V.V.KISHORE

STUDENT CO-ORDINATORS

P.Abbas Ali – 2100040087

A.Leela Ramakrishna-2100040001

M.Subhang – 2100040024



Objective of the OpenCV Workshop

The objective of the OpenCV workshop was to provide participants with comprehensive knowledge and practical skills in utilizing OpenCV for image filtering and enhancement. The workshop aimed to achieve the following goals:

- 1. **Introduction to OpenCV:** Participants were introduced to the OpenCV library, its functionalities, and its applications in computer vision tasks.
- 2. **Image Filtering and Enhancement:** The workshop focused on teaching participants how to perform image filtering and enhancement techniques using OpenCV, including methods such as blurring, sharpening, edge detection, and color manipulation.
- 3. **Retroreflective Cameras and Use Cases:** A session was dedicated to educating participants about retroreflective cameras, their uses, and real-world applications such as in movies and motion tracking.
- 4. **Interactive Learning:** The workshop encouraged interactive learning through demonstrations and hands-on exercises, allowing participants to implement small programs using OpenCV and understand its working principles.
- 5. **Feature Extraction with Iris Dataset:** Participants were introduced to the iris dataset available in the sklearn library and learned how to extract features from it using OpenCV for further analysis and machine learning tasks.
- 6. **Practical Implementation:** The ultimate objective was to equip participants with the skills and knowledge required to apply OpenCV effectively in real-world scenarios, enhancing their capabilities in image processing and computer vision.

Overall, the workshop aimed to bridge the gap between theoretical concepts and practical implementation, empowering participants to leverage OpenCV for image processing tasks and explore its diverse applications.

Description of the OpenCV Workshop:

In this comprehensive workshop, participants will embark on an immersive journey into the captivating domain of computer vision, honing in specifically on the intricate art of face detection leveraging the power of OpenCV. Through a meticulously crafted curriculum, participants will traverse the landscape of theoretical foundations, hands-on implementations, and insightful glimpses into the myriad real-world applications of face detection techniques.

From the very outset, whether you're taking your first steps into the realm of computer vision or already possess a solid grasp of its intricacies, this workshop promises to cater to learners of all proficiency levels. With a dynamic blend of theoretical discourse and practical exercises, participants will find themselves seamlessly transitioning from conceptual understanding to hands-on experimentation, ensuring a deeply enriching learning experience at every turn.

Guided by seasoned instructors well-versed in the nuances of computer vision, participants will delve into the inner workings of face detection algorithms, unraveling the mysteries behind their design and implementation. Through interactive sessions brimming with insightful discussions and collaborative problem-solving, learners will cultivate a holistic understanding of the underlying principles driving facial recognition technologies.

But the journey doesn't stop at theory alone. Armed with newfound knowledge, participants will embark on practical explorations, delving into the intricacies of OpenCV to wield its formidable array of tools and functionalities for face detection tasks. From loading and preprocessing image data to fine-tuning parameters for optimal performance, every facet of the implementation process will be meticulously dissected and explored.

Outcome of the OpenCV Workshop:

The outcome of the OpenCV workshop was highly informative and impactful, leading to several key takeaways for participants:

- 1. **Understanding of Retroreflective Cameras:** Participants gained a comprehensive understanding of retroreflective cameras, including their working principles, advantages, and applications in various industries.
- 2. **Real-World Use Cases:** The session provided insights into real-world use cases of retroreflective cameras, such as their role in movie production, motion tracking, and other advanced imaging applications.
- 3. **Hands-On Experience:** The live demonstration allowed participants to witness firsthand how retroreflective cameras track precise movements, enhancing their practical knowledge and technical skills.
- 4. **Technical Knowledge:** Participants acquired technical knowledge about retroreflective camera technology, enabling them to appreciate the complexities and capabilities of advanced imaging systems.
- 5. **Interactive Learning:** The interactive nature of the session facilitated open discussions, questions, and exchanges of ideas, creating a dynamic learning environment and promoting knowledge sharing among participants.

Overall, the OpenCV workshop significantly contributed to participants' understanding of advanced imaging technologies, specifically retroreflective cameras, and prepared them to explore further applications and advancements in the field of computer vision and image processing.

GEO Tagged Photos





No of students attended the Event - 51

Students Attended 19.01.2024

S.No	ID No	Full Name of the Student	Signature
1	2200030276	PERUMALLA BHASWANTH	Alasucam
2	2200030287	PIDIKITI JAHNAVI	P Jahrni
3	2200030310	CHALLA SAMUEL SIDDHARTHA REDDY	Sidherthan
4	2200030359	CHANDANAM THEJONADH	TEJONADH
5	2200030490	THADIGATLA VIVEK REDDY	Viver great
6	2200030570	NAGARAJ VIGNESH KUMAR	Vi Greek bu
7	2200030733	CHITIRALA NIKITHA	axi bitho
В	2200030758	KUMMARI ARUNKUMAR	Arun kuna
9	2200030970	PADALA KARTHIKA	KARTHILL
10	2200031106	BOLISETTY VISHNU SAMHITHA	Rudber
11	2200031176	GANTA ROHINI REDDY	Rohini reday
12	2200031333	MARISETTI LAKSHMI VENKATA PHANINDRA KUMAR	Vento la Kwa
13	2200031610	LEENA NARMADA GUMMA	a Normado
14	2200031662	BANDLA LAVANYA	Blavonya
15	2200031687	MUNDURU SRI SHRIYA	Shusiya
16	2200031717	MALLAMPATI VISHNU PRIYA	Vishnu Priva
17	2200031814	LANKA RUCHITHA	Ruchitha
18	2200031818	KALLAM MOHITHA REDDY	Molifla Out
19	2100040024	M.H.G SUBHANG	Sudbhana
20	2100040087	P.ABBAS ALI	spuar ali
21	2100040369	T.PRASHANTH KUMAR	2 Baun
22	2200040014	P.GAYATHRI	T. Prashouts
23	2200040015	S.VYSHNAVI	Vyshnow
24	2200040022	GOPINADH.V	is Gorinate
25	2200040026	YUVA	yuva
26	2200040046	BALAJI	Bolaji
27	2200040214	B.VIVEK	Burca
28	2200040227	LALITHA SINDHURI.V	Vsindhuri
29	2200040285	PUJITHA.M	M PUJitha
30	2200040293	M.VYSHNAVI	Vyshum
31	2200049022	CH.THANUSHA	Thansha
32	2200049077	YASHWANTH	Laguarter
33	2200049093	D.BHANU TEJASRI	Tegsai
34	2200049105	S.DEEPTHI	Vashon
35	2200049109	SANDEEP	Gardens
36	2200049110	M.VISHAL VASHAN	Chaki
37	2200049112	CHAKRI	chow.
38	2200032952	KATAKAM HARSHITH GUPTA	barshith
39	2200033092	ANANYA SINHA	sinha
10	2200033099	BANDARU GANESH ATCHYUTH	Atchyun
11	2200033204	BOJJA HEMANVITH	henanoith
12	2200033231	MANCHURI PURUSHOTHAM	Rushofhan
43	2200033238	GOGIKARU SAI DHANUSH	DHanush
14	2200033283	R PAVANI	Reavoini

45	2200039011	GUDAPATI DEVARSHI	devargh
46	2200040052	VEGESNA BHAGAVAN MANIKANTA VARMA	brna
47	2200040053	VEGESNA INDRA VEŅKATA DURGA VARMA	Durga voma
48	2200040089	MANE NAGA SREE SAI CHARAN	Sai charas
49	2200040326	TENTU SAI CHARAN	Ticharan
50	2200040331	KUSUMANCHI VENKATA SAI AKHIL	Sai Akhil
51	2200049055	CHITUMADUGULA RAJA SRIMANTH	CH SYLMONIA

(Dr.E. Kiran Kumar) In-charge

H of Life

Dr. M. SUMAN

Professor & Head

Department of ECE

KLEF

Green Fields, Vaddeswaran

Contur Dist., A.P. PIN: 522 507