



KPR Institute of
Engineering and
Technology

Learn Beyond

(Autonomous, NAAC "A")

HACKXELERATE' 25

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HACKXELERATE ABSTRACT SUBMISSION FORM

COLLEGE/UNIVERSITY : Sri Eshwar College of Engineering

BRANCH/STREAM: Computer science Engineering

ABSTRACT

Affordable and Portable Intraocular Pressure (IOP) Measurement Device

Glaucoma is a leading cause of irreversible blindness, affecting approximately **79.6 million** people worldwide as of **2020**, with this number projected to increase to **111.8 million** by **2040**. Early detection through intraocular pressure (IOP) measurement is crucial for such issue ,but the **traditional tonometers** are **costly, unwieldy, and unavailable**, particularly in places with limited resources or in rural areas.

Our solution addresses this problem by developing a **portable** and **affordable** IOP measurement device. Our device will allow hospitals, optical shops, and small clinics to provide essential **eye health diagnostics** by **reducing expense** and **spatial constraints** of conventional tonometers. Our invention has the potential to transform eye care by facilitating glaucoma screening and guaranteeing **early detection** and **prevention** for marginalized communities.

TEAM DETAILS

TEAM NAME: Technitiz

TEAM	NAME	YEAR OF STUDY	COLLEGE/ UNIVERSITY	CONTACT NUMBER
LEADER	Cibiyanna P	3 rd year	Sri Eshwar College of Engineering	8870322548
MEMBER 1	Muruga Perumal R	3 rd year	Sri Eshwar College of Engineering	6380751005
MEMBER 2	Nithinkumar R S	3 rd year	Sri Eshwar College of Engineering	8072159442
MEMBER 3	Aswath CM	3 rd year	Sri Eshwar College of Engineering	8148582977
MEMBER 4	Aadhavan P	3 rd year	Sri Eshwar College of Engineering	9500818577