

Project Description					
<b>Title</b>	Design and development of a device to capture corneal reflections				
<b>Summary</b>	<p>One of the game changing ideas in eye care diagnostics by Srujana Center for Innovation, L V Prasad Eye Institute, is the development of a device which can be interfaced with mobile phone to detect early keratoconus, especially in adolescents. We have developed initial prototypes as proof of concept. Following this, we want to develop the next iteration and perform clinical validation of the device. This requires a candidate with passion to learn, explore and develop the device with his core competence and take the extra mile to develop and validate this new prototype.</p>				
Job Description					
<b>Position</b>	Junior Engineer	<b>Duration</b>	≥ 6 months	<b>Location</b>	Hyderabad
<b>Role</b>	<p>You will be part of a multi-disciplinary team, working on the next iteration of the project. This project work can be categorized into these primary steps: device development with simulation of ray optics, CAD modelling and 3D-printing of form factor, PCB designing with interfaceable and compact electronics board and sensors to process, and tethering data wirelessly to remote servers. This role demands ample knowledge on image processing to develop algorithms to generate quantifiable and interpretable outcomes, and the ability to develop new techniques to take load off the processing boards. This role would give the opportunities to learn and explore new trending technologies in optics and computer vision and also give the essence of complete device development.</p>				
<b>Required Skills</b>	<ul style="list-style-type: none"> <li>• Well versed with image acquisition and computer vision toolboxes in MATLAB</li> <li>• Strong academic record in analog devices and circuits [Timing and switching circuits]</li> <li>• Basic PCB designing and CAD Modeling</li> <li>• Hands on experience with micro-controllers or single board computers like Raspberry Pi</li> </ul>	<b>Additional Preferences</b>	Experience in building IoT devices using any type of the sensory modules.		
<b>Minimum Qualification</b>			Third year of undergraduate degree in engineering		
How to apply					
<b>Step 1: Fill out this form</b>	<div style="text-align: center;">  <p>Or go to:  <a href="https://forms.office.com/Pages/ResponsePage.aspx?id=CneD9_jEhUihhO5RGoM3Efg8_YNW1KRikP7e79u1kJhUODhDVUUFFWUQ3R1NNQIRJM1AONk5TVk8xSy4u">https://forms.office.com/Pages/ResponsePage.aspx?id=CneD9_jEhUihhO5RGoM3Efg8_YNW1KRikP7e79u1kJhUODhDVUUFFWUQ3R1NNQIRJM1AONk5TVk8xSy4u</a> </p> </div>				

<b>Step 2: Send us your resume</b>	<a href="mailto:srujana@lvpei.org">srujana@lvpei.org</a> with <Your Name>-JE as the subject

