

Project Description					
Title	Video-based gaze tracking estimation for infants				
Summary	<p>Pediatric Perimeter is the first ever device developed to quantify visual fields of infants. (http://tvst.arvojournals.org/article.aspx?articleid=2642910) This device was designed and developed at Srujana Center for Innovation and we have deployed prototypes within the LVPEI network to provides services in vision rehabilitation centers. We are interested in taking this innovation to the next level by making the device “smarter” with the incorporation of gaze tracking. To accomplish this, we require the application of machine learning algorithms on live camera feed of infants undergoing the test. So, if you would like to develop your skills further in the areas of machine learning and computer vision, this would be a good R&D project to take up.</p>				
Job Description					
Position	Junior Engineer	Duration	≥ 6 months	Location	Hyderabad
Role	<p>Camera-based gaze tracking is a trending research area that piques the interest of many. As an engineer working on this project, you will get a chance to build your experience in the area with your own gaze tracking module to show for at the end of your project. The role would require you to constantly read and understand a variety of research papers on the topic in order to design an approach that you will begin work on. There is a good database of videos from tests performed using Pediatric Perimeter in the past which can be utilized as a starting point for your research. You will be required to be proactive and take your proposal from just an idea to a fully working module that can be integrated with the Pediatric Perimeter software.</p>				
Required Skills	<ul style="list-style-type: none"> • Well versed with image acquisition toolbox and computer vision toolbox in MATLAB. • Prior experience using with OpenCV/dlib libraries • Java, Python, C, C++ • Comfortable working on Linux and Windows OS 	Additional Preferences		<ul style="list-style-type: none"> • Knowledge on convolutional neural networks • Familiar with developing software on and for multicore Linux machines 	
Minimum Qualification			Third year of undergraduate degree in engineering		
How to apply					
Step 1: Fill out this form	<div style="text-align: center;">  <p>Or go to: https://forms.office.com/Pages/ResponsePage.aspx?id=CneD9_jEhUihhO5RGoM3Efg8_YNW1KRikP7e79u1kJhUODhDVUFFWUQ3R1NNQIRJM1A0Nk5TVk8xSy4u</p> </div>				

**Step 2: Send
us your
resume**

srujana@lvpei.org with <Your Name>-JE as the subject

