

## **MISTI Internship at ARISE Impact, India**

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Opportunities -

*\*Please apply even if you satisfy only 1 skill listed below Apply here: <http://goo.gl/forms/zWT06XgE51>*

### **Backend (server side) development for websites -**

*Work* - Structure the database and write server-side scripts for various functionalities to be implemented for ARISE websites.

Required Skills -

1. MySQL
2. PHP / Django / NodeJS
3. Any other Database / server side language with demonstrated deployment experience

### **Android App Development -**

*Work* - Develop and modify the Android apps for ARISE. The developers will have to work in close coordination with the backend team.

Required Skills -

1. Experience in Android app development
2. Knowledge of changes in Android development API over the various release versions
3. Experience handling apps with dynamic data (JSON / XML format)

### **iOS App Development -**

*Work* - Develop and modify iOS apps for ARISE. The developers will have to work in close coordination with the backend team.

Required Skills -

1. Experience in iOS app development
2. Proficient in Objective C / Swift
3. Knowledge of changes in iOS API over the various release versions
4. Experience handling apps with dynamic data (JSON / XML format)
5. Knowledge of Apple UI and code guidelines

### **Cross Platform Mobile App Development -**

*Work* - Develop cross platform mobile apps for iOS and Android using web technologies like HTML5, CSS3 and JavaScript. The developers will have to work in close coordination with the backend team.

Required Skills -

1. HTML5, CSS3
2. JavaScript
3. AngularJS (preferable, but not must)
4. PhoneGap / Cordova (preferable, but not must)
5. Experience in Android or iOS development a big plus

### **Machine Learning -**

*Work* - Code the recommendation engine for the mobile application / website using the database managed by the backend team.

Required Skills -

1. Proficient in data structures and algorithms
2. Knowledge of machine learning and recommendation algorithms

### **Natural Language Processing -**

*Work* - Develop modules to interpret language from audio's and convert it to summarized text.

Required Skills -

1. Experienced in NLP

### **Image Processing -**

*Work* - Develop modules for interpreting road signs, currency notes etc.

Required Skills -

1. Experience in image processing / computer vision algorithms
2. Experience in OpenCV / Matlab or any other image processing library

### **UI / UX Designing for Mobile apps and Websites -**

*Work* - Design screens and UI kits for the mobile apps and websites of ARISE.

Required Skills -

1. Experience in Adobe Photoshop / Adobe Illustrator or similar softwares
2. Knowledge of modern day mobile / website UI designing patterns and standards
3. Knowledge of differences in resolutions and aspect ratios in common mobiles and tablets

### **Frontend Development for Websites -**

*Work* - Develop the front-end for the websites of ARISE. The developers will have to work in close coordination with the backend team.

Required Skills -

1. Experience in HTML5 and CSS3 and JavaScript
2. Experience in jQuery / AngularJS
3. Experience in writing responsive web designs
4. Experience in handling AJAX requests

### **Produce animated infographics videos -**

*Work* - Design and develop animated infographic videos for ARISE.

Required Skills -

1. Experienced in Adobe Premiere Pro / Adobe After Effects or similar video creating softwares

### **Hardware Project for Designing Assistive Technology for Visually Challenged**

*Work* - Development of a low cost and scalable Refreshable Braille/tactile augmentation screen display mechanism

Required Skills -

1. Experience/ Demonstrated project in working with microcontrollers & small hardware component development alongwith required firmware implementation
2. Experience / Projects in Augmentation / Assistive technologies preferred, not necessary.

### **Rollout Strategy for ARISE Impact Partnership Network**

*Work* - Strategize the best fit rollout plan for ARISE Impact partnership to scale impact throughout India and the USA.

#### **Preferred Skills -**

1. Any consulting / strategy experience / gathering market data and market analysis
2. Any experience in non-profit sector
3. Any experience in sales, or customer handling/ sales call
4. Candidates looking to diversify from their technical expertise are encouraged to apply along with a 'Purpose Statement: Which skillset development would you like to undertake for internship and how does ARISE gain from it?'

Time and Locations -

*Multiple / India (Chandigarh, Lucknow/Mumbai, Delhi) from July - August, 2015*

#### **About ARISE**

Act to Rise for Innovation in Special Education (ARISE) is a non-profit Charitable Trust headquartered at Chandigarh, and recognized with charitable status. We develop and disseminate self-learning resources for the differently-abled and marginal communities. Our philosophy is of self-learning leading self-awareness, empowerment and hence, focusing on increasing engagement with education and likelihood of employability over the longer term.

We started serving our mission first in 2010, with Special Education Module for Visually Challenged at Institute for the Blind, Sector 26, Chandigarh. Special Education Module is a talking audio resource compatible across various devices, especially mobile platforms. We conducted in-classroom on-ground research studies to build models of cognitive learning for visually challenged children and their skillset and learning gaps. Based on our research, we have developed over 200 SEMs and distributed to more than 300 visually challenged children in India. Our impact has shown in typical 21% increase in test scores, shifting second-divisions to first, and gaining 98-100% engagement levels with our SEMs.

Besides, SEM, our focus is to develop a universal access learning Android App and game-based learning modules for visually challenged, deaf and dumb, and physically challenged. Our current working collaboration include Institute for the Blind, Institute for the Deaf and Dumb, Indian Association for Muscular Dystrophy, Internshala, HelloIntern, Nirmaan, Swami Ram Krishna Paramhansa Maa Sharda Sewa Samiti, Medha Society, etc.

Our innovations span over 3 patent-pending technologies with 8 years of combined research. We are registered with United Nations Online Volunteering Program and also awarded under Google Grants and Salesforce. We are collaborating with MITx Entrepreneurship, MISTI India and Imperial College Desk to Difference Program. We are also a BNID (Boston Network for International Development), Building Impact and CityAwake partner organization.

ARISE is winner NGO in Mobile Usage category under eNGO Challenge Awards (2014) amongst 700 NGOs in South Asia region and a Social Enterprise partner for City Awake Conference in Boston, USA.