KAMALPREET SINGH SALUJA

@ ksaluja24@gmail.com +91-9479704765 Bangalore
in linkedin.com/in/kamalpreetsaluja/ researchgate.net/profile/Kamalpreet_Saluja

Interested in *Human Computer Interaction, Assistive Technologies, Eye Tracking, MultiModal Interaction Design, Mixed Reality*

EXPERIENCE

Research Assistant

I3D Lab, CPDM, Indian Institute of Science

Feb 2018 – Present Bangalore

- Designed and developed Interactive Smart Sensor dashboard for **Virtual Reality** Environment with Eye Tracking and developed visualizations for High Dimensional Data.
- Designed and Developed inclusive applications for users with Severe Speech and Motor Impairment(SSMI) using **Eye Gaze Tracking** and also working for Cognitive and Auditory Rehabilitation for Elderly .
- Design and Developed gaze-controlled interfaces for real time in-flight/simulator scenarios and automotive domain.

Research Intern

IDeAS Lab, CPDM, Indian Institute of Science

July 2017 – Jan 2018 Bangalore

- Explored the design space in Life Cycle Assessment (LCA) for any product. OpenLCA is a tool to assess environmental sustainability of Product Life Cycle.
- Developed a Mutually Coordinated Interactive visualization platform tool named “Sweet Spot” which can act as a plugin to OpenLCA .

Software Consultant

Innoeye Technologies

6 Months Indore

- Worked on Project SITEFORGE for Reliance 4G providing Automated Business Rule Validation and Workflow Orchestration. Implementated UI workflows generating automated reports, integrating the Server Backend with Hibernate, Spring MVC and REST.

ACHIEVEMENTS

Awarded Best Presenter Award(s) at ICGSP’19 for two sessions.

Designed and Developed ICoRD’19 conference website

SKILLS

- Programming Language: *C,C++, Java(J2EE), C#.NET, JavaScript,Python*
- Familiar: *HTML/CSS, JQuery, REST Web Services, Spring MVC, Hibernate, D3.js, JavaFX, Eclipse RCP, Gradle, Maven, Android, MySQL, Unity 3D, Eclipse, Net Beans, Rational Rose, Visual Studio*.
- Sensors: *Eye Gaze Trackers (Tobii), Hand Motion Tracker (Leap Motion), Oculus VR, HTC Vive Pro2 Eye, Raspberry Pi, IoT Sensors(ESP8266,ESP32,BH1750)*

EDUCATION

B.E. in Computer Science

Rajiv Gandhi Prodyogiki Vishwavidyalaya

July 2012 – June 2016
CGPA: 7.74

Journal Publications

- M. D. Babu, JeevithaShree DV, G. Prabhakar,**KPS Saluja** and P. Biswas, **Estimating Pilots’ Cognitive Load From Ocular Parameters Through Simulation and In-Flight Studies**, Journal of Eye Movement Research, Bern Open Publishing, 12 (3), 2019
- Jeevithashree DV, **KPS Saluja** and P. Biswas, **A case study of developing gaze controlled interface for users with severe speech and motor impairment**, Technology and Disability 31(1), IOS Press, 2019
- JeevithaShree DV, **KPS Saluja**, LRD Murthy and P. Biswas, **Operating different displays in military fast jets using eye gaze tracker** , Journal of Aviation Technology and Engineering 8(1), Purdue University Press, 2018

Conference Proceedings

- **KPS Saluja**, Jeevithashree Dv, S. Arjun and P. Biswas, **Analyzing Eye Gaze Movement of Users with Different Reading Abilities due to Learning Disability**, 3rd International Conference on Graphics and Signal Processing (ICGSP 2019, **Best Presentation Award**)
- A. Agarwal, JeevithaShree DV, **K S Saluja**, A Sahay, P Mounika, A Sahu, R Bhaumik, V K Rajendran and P. Biswas, **Comparing Two Webcam based Eye Gaze Trackers for Users with Severe Speech and Motor Impairment**, International Conference on Research into Design (ICoRD 2019) [**Distinguished Paper Award**]
- Jeevithashree DV, **K. P. Saluja** and P. Biswas, **Gaze Controlled Interface for Limited Mobility Environment**, ACM International Conference on Designing Interactive Systems (DIS) 2018
- LRD Murthy ,A. Mukopadhyay, V. Yellheti., S. Arjun, P. Thomas, M. DilliBabu, **K. P. Saluja**, Jeevithashree DV, and P. Biswas, **Evaluating Accuracy of Eye Gaze Controlled Interface in Military Aviation Environment**, IEEE Aerospace Conference 2020(To Appear)