

Job Description

Job Title	Computer Vision and Media Processing Researcher
Responsible to:	Artificial Intelligence Research Department Manager
Responsible for:	Hitachi R&D Group, Center for Technology Innovation, Artificial Intelligence Research Department
Appointed Deputy	—
Job Function:	Research and development of computer vision and media processing technologies including development of systems and applications related to such as video surveillance, smart factory, autonomous driving, IT systems, biopsy measurement, biometrics and medical systems.

Main Responsibilities

Our department has responsibilities for research and development of AI technologies especially related to computer vision and media processing which are widely applied to Hitachi's business regions such as industry, transportation, IT systems, medical systems, smart cities, energy systems and so on.

The role on offer will contain the following responsibilities;

- Research and development of computer vision and media processing
Conducting research activities and achieving predetermined research results
- Products, systems and applications development
Designing architectures for products, systems and applications
Programming and software development
- Joining team and research project management
Supporting leaders for organization management

As part of the role, the candidate will need to be able to;

- Creating new ideas for computer vision and media processing technologies
- Developing software and hardware for experiments and conducting experiments and evaluations
- Presenting technologies and executing PoC experiments with customers and business unit members
- Writing reports, patents, conference papers and journals
- Finding and understanding the latest technologies and global market trend in the field
- Leading and educating other members in the research team for some specific field
- Proposing new research theme
- Joining discussions and meetings for organization management
- Executing miscellaneous assignments (inventory checking and so on)
- Inspiring and motivating other members to challenge and solve issues or to improve efficiency for future company growth, and based on Hitachi Values (Harmony, Sincerity and Pioneering Spirit).

Job Skills, Experience and Qualifications

Essential

Skills / Experience

- Enough academic knowledge and research experience in the field of either computer vision, media processing, data analysis, robotics, ARVR or human machine interaction.
- Programming skills and experience with either of C, C++, C#, Java, Swift or Python.
- Familiarity with machine learning, deep learning, neural network and their programming frameworks such as TensorFlow and PyTorch.
- Communication skills in English
- Having excellent communication and negotiation skills
- Demonstration of being able to complete a technical project whilst working effectively with other team members
- Effective cooperation to satisfy internal stakeholders and all the external stakeholders to achieve team goals.

- Experience of presentation at international conference in AI, computer vision, image processing field.

Licences / Competences

None

Qualifications

Either of Electrical Engineering, Information Engineering or Computer Science, preferably a Master or Doctor degree

Behavioural

- Hard working within a team and acting in accordance with the company's Mission, Vision and Value
- Respect teamwork and dealing with staff, customers, business unit members and third party at all levels
- Flexible mindset even in sudden change of the situation
- Passion and drive to deliver, "can do" attitude.
- Global collaboration mind
- Positive mindset to learn Japanese language and culture

Desirable

- Foreign Language skills e.g. Japanese etc
- Awards or high rank acknowledgement in competitions or technical contests.

Appendix:

Multifeatured Video Search - Hitachi

<https://www.youtube.com/watch?v=dbS4DmTQuc4>

Solutions to visualize workers' loads - Hitachi

<https://www.youtube.com/watch?v=kWTsU0CAE68>

Generalizable person re-identification for practical automated video surveillance systems

<https://www.hitachi.com/rd/sc/aiblog/044/index.html>

Deployment conscious automatic surface crack detection

<https://www.hitachi.com/rd/sc/aiblog/032/index.html>

Activity recognition using wearable sensors for low-cost deployment

<https://www.hitachi.com/rd/sc/aiblog/025/index.html>