



Qualcomm Technologies, Inc.

Qualcomm Research Silicon Valley
3135 Kifer Road
Santa Clara, CA 95051

www.qualcomm.com

Posting Title

R&D Systems engineer (Embedded Vision Algorithm Development)

Job Function

Qualcomm Research focuses on developing cutting-edge hardware, systems and software technologies and solutions that continue to drive innovations in the mobile ecosystem and help to maintain company technology leadership position.

Qualcomm Research Silicon Valley is seeking for motivated and driven individual skilled in computer vision/machine learning algorithm development and their implementation. The person will work on innovative projects in the area of Embedded Vision. The role covers a broad variety of tasks in the field on advanced computer vision with initial focus on the current project dealing with ultra-low power sensor (and sensor arrays) systems and related hardware, algorithms and software. The person will be responsible for research, development and testing of CV/ML algorithms and their implementation into prototype modules, with subsequent transfer to commercialization. It is expected that the individual will effectively collaborate with Qualcomm partners across different disciplines (systems, hardware, software, product management) from different groups/divisions and locations. Part of the responsibility will be to support engagements on customer specific development requests and tasks.

Skills/Experience

- Deep hands-on experience in CV/ML algorithm development for embedded vision applications, both general-purpose computer vision algorithms and hardware-optimized computer vision algorithms
- Track-record of developing and testing algorithms for vision sensor systems (e.g. feature/object recognition and tracking)
- CV/ML algorithms specifically optimized for low complexity and power towards the following application areas: Activity detection, object detection, key point detection and tracking, stereo

- Algorithm development utilizing neural networks (CNN/RNN)
- Excellent coding skills, knowledge of state-of-the-art programming tools and on latest computer vision/machine learning standards and datasets, like OpenCV, OpenVX, C/C++
- Hands-on experience using Matlab/ Python tools
- Good knowledge of image sensor systems, hardware and circuits is a plus
- Solid understanding of digital logic design and implementations, in particular hardware accelerators and vision-specific processors and cores
- Experience with programming in ARM processors a plus.
- Good knowledge of the state-of-the art and trends in the embedded vision field, both industrial and academic R&D
- Strong teamplayer, independent and motivated

Educational
Requirements

Required: Master's, Electrical Engineering, Computer Science or related fields
Preferred: PhD, Electrical Engineering, Computer Science or related fields

Contact Info

If interested in this position, please apply on-line:
<https://jobs.qualcomm.com/public/search.xhtml>
Job # E1940557