Senior Computer Vision Researcher

Asensus Surgical is currently seeking a Senior Computer Vision Researcher to join our top-notch Research & Development team in Israel.
This is an exciting time to join Asensus and to be part of a leading edge team that is pioneering a new era of Performance-Guided Surgery.
You will help lead the development of a next-generation vision-assisted surgical robotics platform. As a researcher on the team, you will get a chance to work alongside some of the best minds in the field and implement the latest Machine Learning and Computer Vision algorithms, in a multidisciplinary and dynamic environment.
We are looking for an individual who is a team player and a strong communicator. Someone who has great problem-solving skills, and who has a drive for creativity and innovation, as well as determination and persistence. Someone who has a deep understanding of algorithms and image processing and will take ownership of various Vision/deep learning/AI algorithms utilizing medical imaging data & sensory data through exploration, development, optimization, validation & integration.

Who We Are
As a medical device company, Asensus is digitizing surgery to pioneer a new era of Performance-Guided Surgery. Utilizing robotic technology to improve minimally invasive surgery in ways that matter to patients, physicians, surgical staff, and hospitals and enabling consistently superior outcomes and a new standard of surgery. Our employees are especially passionate about the work they do and thrive in a collaborative environment that fosters creative solutions to complex problems. The work is challenging, but everyone comes to Asensus Surgical looking for a fulfilling career, and that’s exactly what they find.

What You Bring
- Minimum of 5 years of experience developing Computer Vision algorithms
- PhD in Computer Science or related fields (EE, Math, Physics, etc.); MSc with outstanding demonstration of capabilities will be considered as well.
- Programming experience in C++ and Python/Matlab
- Experience in developing deep-learning based solutions for computer-vision challenges
- Acquaintance with toolkits for deep-learning such as TensorFlow/PyTorch
- Familiarity with IPP, OpenCV and similar libraries
- Experience contributing to research communities and/or efforts, including publishing papers at relevant conferences/journals and/or filling patents.
- Experience in a global medical device company, developing software or implementing algorithms on GPU will be considered an advantage
- Deep domain experience and hands-on knowledge or academic research background in at least one of the following is an advantage:
○ VAN/SLAM
○ Motion estimation (i.e Optical flow, Tracking)
○ Segmentation
○ Super resolution
○ 3D reconstruction

● Good verbal and writing capabilities in both Hebrew and English
● Ability to work in team environment and collaborate with a remote based team

What You’ll Do
● Work with a multi-disciplinary team of experts and engineers to deliver an end-to-end product: from the idea phase, through collecting and assessing the data, exploring algorithmic approaches, developing, testing, validating and integrating the algorithm in the production environment
● Research, design, develop and implement Computer Vision, Machine Learning and Deep Learning based vision algorithms.
● Contribute to the team’s methodologies, best practices and toolset, as well as sharing and receiving constructive feedback
● Understand algorithmic requirements and convert these into usable solutions
● Utilize existing research, literature and study of existing state of the art tools to develop best in class solutions
● Develop mathematical and numerical tools to support development
● Manage large amounts of data and process into usable information
● Evaluate the performance on benchmarks and improve as necessary

What We Offer
● A culture driven to achieve our mission and deliver remarkable results
● Coworkers committed to collaboration and winning the right way
● Quality products that improve the lives of our customers and patients
● Ability to discover your strengths, follow your passion and find your own rewarding career
● Flexible, engaging work environment

At Asensus Surgical, we believe in contributing to a society that welcomes diverse voices and values differences in lived experiences, culture, religion, age, gender identity, sexual orientation, race, ethnicity, and neurodiversity. We are committed to ensuring this same environment for our employees – a culture where individuals feel safe, heard, and respected. We celebrate the uniqueness of our global workforce and know that only through inclusion, ongoing learning, and partnership can we succeed. Together we are all stronger.

Send your CV: mfrimer@Asensus.com