Application: 4245

Roman Axelrod

Page: General Information

Provide information about the company to be considered for the award. If you will be nominating an individual, specify the nominee's employer.

Name of Organization/Company

XPANCEO

Additional Contacts

I would also like to have others receive emails about the disposition of our entries.

Page: Entry Information

Entry Title

Roman Axelrod

Category

L10. Executive of the Year - Entertainment Technology

Executive Nominee Submission Format

Written Answers

a. Briefly describe the nominated executive's employer: the organization's history and past performance (up to 200 words). Required

XPANCEO is a deep tech company that is developing the first smart contact lenses with AR vision and health monitoring features. As a founder and managing partner at XPANCEO, Roman Axelrod formed a team of executive leaders and over 40 scientists and engineers from leading universities, research institutions, and other deep tech companies. With 50% of the research team boasting PhD, this year they have revealed 4 prototypes of smart contact lenses. Roman leads the team toward the goal of conducting the first tests of the perfect all-in-one smart contact lens in 2026.

Additionally, XPANCEO has announced in Nature Communications a groundbreaking discovery of new properties of rhenium diselenide and rhenium disulfide, enabling novel mode of light-matter interaction with huge potential for integrated photonics, healthcare, and AR. XPANCEO has recently secured a \$40 million seed round from a single investor, Opportunity Venture (Asia).

Roman Axelrod is an experienced entrepreneur and tech enthusiast who has successfully built ventures in the computer vision, esports, and fintech industries. With 3 successful exits, Roman has expertise in negotiating deals totaling over \$5 billion, and he played a key role in helping several companies expand into Western Europe, the USA, and APAC.

b. Outline the nominated executive's achievements since the beginning of 2022 that you wish to bring to the judges' attention (up to 250 words). Required

Roman leads the company that was included in top five optic laboratories in the world by BCG.

Over the past year the company has developed and rigorously tested 4 distinct prototypes in their laboratory, enabling night vision and zoom capabilities, real-time health monitoring, and the ability to view video and graphic content in AR.

The first one is the holographic smart contact lens, which displays images that previously were only visible with glasses and full AR/VR headsets. In its final stage, it will provide an infinite XR experience and will allow the wearer to interact with content like video, social media, gaming, and more. The second product is a lens with biosensing capabilities that boasts continuous health monitoring capabilities, and interacts directly with the eye's surface. One of the features integrated in this lens was a biosensor that measures intraocular pressure. This aids in early glaucoma detection, a particularly important capability given the projected rise in glaucoma cases by 2040. The third prototype is a lens with nanoparticles for supervision. Nanoparticles are a million times thinner than human hair, and create a 'super material' when incorporated into the lens. This improves vision in low light and enables adaptive zooming capabilities. Lastly, there is a lens with transparent electronics. Featuring a working one-pixel display, this prototype solves the challenge of integrating electronics into a smart contact lens. It utilizes a patent-pending technology with quasi-two-dimensional gold conductors, enabling thin and flexible components.

c. Explain why the achievements you have highlighted are unique or significant. If possible compare the achievements to the performance of other executives in your industry and/or to the nominee's past performance (up to 250 words). Required

Combining 20+ potentially patented technologies in advanced optic and photonics, novel material, AI, and neural interfacing, enables XPANCEO the creation of ultra-compact and highly efficient optoelectronic devices in smart contact lenses. This is how Roman Axelrod and the team are creating an inclusive future that prioritizes health, education, innovation, and partnership, supporting the UN's Sustainable Development Goals. For instance, if a person suffers from strabismus, they can use these lenses instead of corrective glasses and occluders. They will be beneficial both for prevention and treatment of strabismus. However, in the case of cataracts, when the lens becomes cloudy, contact lenses are not particularly recommended. Nevertheless, XPANCEO has advancements in the field of artificial lenses, which will be beneficial for patients suffering from cataracts.

This year XPANCEO team has also announced in Nature Communications a discovery of the new properties of Graphene-like materials that will make possible detection of dangerous diseases and viruses, such as cancer or COVID, at earlier stages; increasing the accuracy of blood tests while making them much more cost-effective; development of more powerful, heat-resistant computers for machine learning; enhancing image coloration for smart XR lenses and glasses, aiding those with color impairment.

d. Reference any attachments of supporting materials throughout this nomination and how they provide evidence of the claims you have made in this nomination (up to 250 words). Optional

With 50% of the research team boasting PhD, XPANCEO team has already revealed 4 prototypes of smart contact lenses. TechRadar article reveals those 4 prototypes presented this year.

Nature Communications article reveals a discovery of the new properties of Graphene-like materials 'rhenium diselenide' and 'rhenium disulfide'. The articles on The Next Web and Interesting Engineering give practical insights on usage of these materials.

Forbes article features a commitment to epitomize technological innovation, promote personal health awareness, facilitate remote patient monitoring, and contribute to the management of non-communicable diseases.

Webpage Link

https://youtu.be/i2xHUoDoQRI (https://youtu.be/i2xHUoDoQRI)

Would you like to add an additional webpage link?

Yes

Webpage Link 2

https://techcrunch.com/2023/10/16/xpanceo-a-deep-tech-startup-raises-40m-to-focus-on-smart-contact-lenses/ (https://techcrunch.com/2023/10/16/xpanceo-a-deep-tech-startup-raises-40m-to-focus-on-smart-contact-lenses/)

Would you like to add an additional webpage link?

Yes

Webpage Link 3

https://www.youtube.com/watch?v=Hp-eRIQm_Cg (https://www.youtube.com/watch?v=Hp-eRIQm_Cg)

Would you like to add an additional webpage link?

Yes

Web Page Link 4

https://thenextweb.com/news/graphene-nobel-winner-discovery-smart-contact-lenses (https://thenextweb.com/news/graphene-nobel-winner-discovery-smart-contact-lenses)

Would you like to add an additional webpage link?

Yes

Web Page Link 5

https://interestingengineering.com/science/noble-laureate-helps-discover-new-material-to-boost-ai-vr-healthcare (https://interestingengineering.com/science/noble-laureate-helps-discover-new-material-to-boost-ai-vr-healthcare)

Would you like to add an additional webpage link?

Yes

Web Page Link 6

https://www.techradar.com/health-fitness/xpanceo-wants-to-give-you-smart-contact-lenses-that-could-tell-you-if-you-really-should-have-that-second-cup-of-coffee (https://www.techradar.com/health-fitness/xpanceo-wants-to-give-you-smart-contact-lenses-that-could-tell-you-if-you-really-should-have-that-second-cup-of-coffee)

Would you like to add an additional webpage link?

Yes

Web Page Link 7

https://www.nature.com/articles/s41467-024-45266-3 (https://www.nature.com/articles/s41467-024-45266-3)

Would you like to add an additional webpage link?

Yes

Web Page Link 8

https://techcrunch.com/2024/04/12/sample-seed-pitch-deck-xpanceo/ (https://techcrunch.com/2024/04/12/sample-seed-pitch-deck-xpanceo/)

Would you like to add an additional webpage link?

Yes

Web Page Link 9

https://www.forbes.com/sites/stevenaquino/2024/02/15/xpanceo-executives-talk-smart-contact-lenses-the-future-ofcomputing-accessibility-in-interview/ (https://www.forbes.com/sites/stevenaquino/2024/02/15/xpanceo-executives-talksmart-contact-lenses-the-future-of-computing-accessibility-in-interview/)

Would you like to add an additional webpage link?

Yes

Web Page Link 10

https://wired.me/technology/smart-contact-lens/ (https://wired.me/technology/smart-contact-lens/)

Supporting Document

No File Uploaded

Would you like to add an additional supporting document?

No

By your submission of this entry to The Stevie Awards, you verify that you have read and agreed to abide by the regulations, terms and conditions of the competition (https://www.asia.stevieawards.com/rules-and-terms-conditions-competition).

Terms and Conditions

I Agree