April 25, Vahan Simonyan, WHISE: A Scalable Economy for Healthcare Data Markets

During this presentation, Dr. Simonyan will discuss WHISE for creating incentives and promoting the liberation of health data through patient ownership, exchange of proprietary data, and by adding value through intellectual and analytic insights. The WHISE technology provides a service based architecture where the exchange between consumer and owner of information can happen with data or with derived and computed information. It allows assetization of data and commoditization of data access.

Session details...

BIO:

Dr. Vahan Simonyan has a solid scientific background in varied academic disciplines: M.S. in Physical Organic Chemistry, Ph.D. in Quantum Physics and Mathematics, post-doctoral training in Nanotechnology and Quantum Statistical Thermodynamics. After 2001, he switched his expertise to biotechnology and biomedical informatics and currently serves at the FDA as a lead scientist of HIVE, R&D Director of Bioinformatics. Vahan is a prolific author of scientific publications in physics, chemistry, quantum chemistry, nanotechnology, biotechnology, population dynamics, and bioinformatics. Additionally, Dr. Simonyan is an adjunct professor at the George Washington University, where he teaches and develops curriculums for biomedical big data informatics and biostatistics research and development courses. His accomplishments in academic and R&D technology carriers have been complemented with the success of technology leadership roles at NCBI and FDA where he established large-scale and complex, science-heavy R&D infrastructures capable of serving worldwide communities for research and regulatory purposes.

In 2013, High-performance Integrated Virtual Environment (HIVE) codebase was donated by Dr. Simonyan to the US government in order to build a platform ready to accept NGS data at the US FDA for regulatory review. Today HIVE has supported regulatory review and research leading to peer-reviewed publications in genetics, genomics, proteomics, data modeling, and bioinformatics.

In 2016, Dr. Simonyan and his colleagues (Raja Mazumder and Jeremy Goecks) have published the first BioCompute paper where they introduced the new concept for bioinformatics harmonization. Today BioCompute is represented by a large international consortium of regulatory and research scientists from academia, industry, technology companies and government organizations.

In 2017, the technology experts Dr. Simonyan (FDA) and Shahram Ebadollahi (IBM) have led a research collaboration between FDA and IBM on testing feasibility of blockchain for healthcare data. The initiative called Healthcare Data Exchange Framework (HDEF) targets the facilitation of healthcare data transactions by creating an incentive framework for patient ownership of their medical data.

SUMMARY:

Topic: Wellness and Health Information Secure Exchange (WHISE): A Scalable Economy for Healthcare Data Markets

Speaker: Vahan Simonyan, Ph.D., George Washington University, School of Medicine and Health Sciences

Date: Wednesday, April 25, 2018

You are invited to listen to Dr. Simonyan's presentation in the NCI Shady Grove Building on Medical Center Drive or via WebEx. **Dr. Simonyan will present onsite at the Shady Grove location.**

Presentation: A screencast of the presentation will be available for viewing after the event on the NCI CBIIT Speaker Series YouTube Playlist

About the NCI CBIIT Speaker Series:

The National Cancer Institute (NCI) Center for Biomedical Informatics and Information Technology (CBIIT) Speaker Series presents talks from innovators in the research and informatics communities. The biweekly presentations allow thought leaders to share their work and discuss trends across a diverse set of domains and interests. The goals of the Speaker Series are: to share leading edge research; to inform the community of new tools, trends, and ideas; to inspire innovation; and to provide a forum from which new collaborations can begin. For additional information, including past speaker series presentations, visit the CBIIT Speaker Series page.

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