DEEP CUBE ANNOUNCES COLLABORATION WITH UNIVERSITY HOSPITAL OF GENEVA (HUG) TO DEVELOP HIGHLY EFFICIENT ARTIFICIAL INTELLIGENCE-BASED ALGORITHMS FOR ACCURATELY DIAGNOSING EARLY STAGE ALZHEIMER'S DISEASE

- **Provides higher accuracy in evaluating PET brain scans**
- **Prepares for a future path of AI drug efficacy with anti-Tau & anti-amyloid markers**
- **New approach identifies disease at earlier stage and out-performs other AI models**

Lausanne, Switzerland, February, 14th, 2020 – Deep Cube SA, a Swiss-based artificial intelligence (AI) startup, announced today that it has established a collaboration with University Hospital of Geneva (HUG) to use AI-based algorithms to better evaluate brain positron emission tomography (PET) scans measuring glucose metabolism to diagnose patients with Alzheimer's disease . Deep Cube's algorithms are able to help to diagnose Alzheimer disease with 97.3 percent accuracy.

Alzheimer's disease is a neurodegenerative disorder caused by neuronal death due to two misfolded proteins, beta amyloid (β-Amyloid) and hyperphosphorated tau (pTau). According to DEEP CUBE, new possible AI diagnostics approach for Clinical trials of Pharmaceutical corporations could also play a key role to measure drug efficacy in clinical trials aimed at treating Alzheimer's. New Ai models might also be developed to show the drug's efficacy in the brain.

Alexandre Gouy, Deep Cube's AI engineer on Alzheimer's, commented, 'Accurate early diagnosis is crucial in neurodegenerative diseases as it allows future therapy to begin earlier. Actually, the benefits of the AI Model are, to improve the Alzheimer diagnostic itself at hospitals side. Our combined neural networks architectures with imaging and biomarkers, reaches state-of-the-art AI performance using a minimal amount of data, approximately 200 PET scan images.'

Deep Cube CEO Chris Patris de Broe also commented, 'The future of AI in neurosciences is a combination of three input sources: medical imaging, biomarkers and genomic data. At 97.3 percent accuracy, our AI team has been able to surpass two other Alzheimer's AI models (even if data is not comparable in each of those models, the result of AI models are tangible), one at Google with 94.2 percent sensitivity and another at the Massachusetts Institute of Technology (MIT) going at 85 percent sensitivity. So far, the best doctors have been able to do in analyzing Alzheimer's PET images is 93 percent accuracy*, showing 7% of misdiagnoses. Our Deep Cube AI Alzheimer's Model is showing minimal misdiagnoses at 2.7 percent, lower than human reading and fully automated, and able to divide by 2 the percentage of misdiagnosis.'

About Deep Cube

Founded in 2018 and based in Lausanne Epalinges at BIOPOLE in Switzerland, **Deep Cube SA** specializes in developing innovative artificial intelligence (AI) technology based on Deep Learning. The company operates two focus areas, one in analyzing skin disorders such as skin melanoma and skin non-melanoma and the other in diagnosing human brain PET scans for Alzheimer's disease. Deep Cube is the recipient of prestigious awards and industry prizes: 2017 Best AI Award at the Multimodal Emotion Recognition Challenge (MEC), best AI Award at the 2018 Convention on Computer Vision and Pattern Recognition (CVPR), First prize at the 2019 Consumer Electronics Show (CES ASIA) and Second prize at the 2019 World AI Conference (WAIC) and including a recent world record in mathematics with HPC computing on HPE's APOLLO 6500 Server for the computation of Phi (the golden ratio) with 20,000,000,000 digits, executed in only 6.9 days.

More information is available at www.deepcube.ch

Contacts:

For any country out of the USA

Chris Patris de Broe
Deep Cube SA
Lausanne Epalinges, Switzerland
Telephone: +41 (0)78 631 50 20
chris@deepcube.ch

 or USA

Edward D. Agne
The Communications Strategy Group
Boston, Massachusetts, USA
Telephone: +1 781 631 3117
edagne@comstratgroup.com