



Guest Lecture

George Jojo Boateng

**SuaCode Africa 2.0: Teaching
Coding Online to Africans using
Smartphones during COVID-19**

Friday, January 22, 2021, 3:00pm - 4:30pm ,CET

Zoom: ethz.zoom.us/j/94852896207

About George Boateng

George Boateng is a computer scientist, engineer, and educator born and raised in Ghana. He is a PhD Candidate at ETH Zurich, Switzerland, where he is developing a smartwatch-based machine learning method for multimodal emotion recognition among romantic couples. He is also the President and Cofounder of [Nsesa Foundation](#), an education nonprofit whose vision is to spur an “Innovation Revolution” in Africa — a movement in which young Africans are building innovative solutions to problems in their communities using STEM through the programs: [Project iSWEST](#), [STEM WOW](#), and [SuaCode](#). George’s work with Nsesa Foundation has been featured in the [Dartmouth Engineer Magazine](#) and the [Dartmouth News](#). George has a B.A. in Computer Science and an M.S. in Computer Engineering from Dartmouth College, U.S.

About the Lecture

According to SAP, less than 1% of African children leave school with basic coding skills. Lack of access to computers for teaching and learning hampers efforts to teach coding to Africans. Yet, there is a proliferation of smartphones in Africa. In Spring 2020, I ran [SuaCode Africa 2.0](#), a smartphone-based online coding course during the COVID-19 pandemic that taught Africans coding in English and French. SuaCode Africa 2.0 builds upon past works: [SuaCode Pilot \(2018\)](#), [SuaCode Ghana \(2019\)](#), and [SuaCode Africa \(2019\)](#). We received 2.2K+ applications from 60 countries across 5 continents. Out of that, 1.3K students enrolled, 740 students were admitted and 64.2% completed and built a [pong game on their phones](#). In this talk, I will share details of the program, lessons learned and some of our ongoing next steps leveraging AI to improve learning outcomes such as student dropout prediction, code plagiarism detection, and [our AI teaching assistant, Kwame](#). This work is in line with my vision to democratize coding education across Africa by leveraging the untapped potential of smartphones, and eventually bring coding skills within arms reach of millions across Africa, literally into their palms.

Prof. Dr. Tobias Kowatsch

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