George Jojo Boateng

Computer Scientist | Engineer | Educator | Social Entrepreneur

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Bio

George is an incoming Postdoctoral Researcher (focus on Digital Biomarkers) at ETH Zurich, Switzerland, and a Visiting Researcher at the University of Cambridge, U.K. His research is at the intersection of ubiquitous computing (mobile and wearable), applied machine learning, and mobile health and has resulted in over 30 peer-reviewed publications. He is also the CEO and Cofounder of SuaCode.ai, an AI EdTech start-up that is democratizing science and technology education across Africa using smartphones and AI. He previously worked as an Applied Scientist at Amazon (Alexa AI) and he was recently recognized as one of the 2022 IBM New Creators and 2021 MIT Technology Review's 35 Innovators Under 35. George has a BA in Computer Science and an MS in Computer Engineering from Dartmouth College, U.S. He successfully defended his PhD in Applied Machine Learning at ETH Zurich, Switzerland in September 2022.

Professional Objective

My primary goal is to be a professor that does research at the intersection of computer science/engineering and medicine toward improving people's health in real-world settings. I'm taking the first step with my postdoctoral research focused on developing a digital biomarker for monitoring and predicting disease severity in rheumatoid arthritis patients. Furthermore, I would like to be an entrepreneur that co-founds startups that develop technologies to impact lives. This journey has started with my current AI EdTech startup, SuaCode.ai, and will continue in the future through startups that will spin out of my research.

EDUCATION

Jan 2022-Now   **UNIVERSITY OF CAMBRIDGE**   **Cambridge, U.K.**
Visiting Researcher, Department of Computer Science and Technology

2018-Dec 2022   **ETH ZURICH**   **Zurich, Switzerland**
PhD Candidate, Applied Machine Learning, Center for Digital Health Interventions (CDHI)
- Thesis – *Multimodal Emotion Recognition among Couples from Lab Settings to Daily Life using Smartwatches*

2016-June 2017   **THAYER SCHOOL OF ENGINEERING AT DARTMOUTH COLLEGE**   **Hanover, U.S.**
M.S. Computer Engineering
- E.E. Just Graduate Fellow
- Thesis – *ActivityAware:* **Wearable System for Real-Time Physical Activity Monitoring among the Elderly**

2012-June 2016   **DARTMOUTH COLLEGE**   **Hanover, U.S.**
B.A. Computer Science modified with *Engineering*
- E.E. Just STEM Scholar, Neukom Scholar
- Senior Honors Thesis – *StressAware: App for Continuously Measuring and Monitoring Stress Levels in Real Time on the Amulet Wearable Device*

Summer 2014   **TUCK SCHOOL OF BUSINESS AT DARTMOUTH**, *Business Bridge Program*   **Hanover, U.S.**
- Participated in a highly selective business program developing skills in managerial economics & business strategy
- Performed a team-based valuation analysis of Brown-Forman which was presented to Tuck MBA professors

Spring 2014   **UNIVERSITY OF TOULOUSE**   **Toulouse, France**
- Participated in a French Language Study Abroad

2007-2011   **MFANTSIPIM SCHOOL**   **Cape Coast, Ghana**
- WASSCE Certificate — General Science: Chemistry, Physics, Elective Mathematics, Technical Drawing

RESEARCH EXPERIENCE

2018-Present **ETH Zurich - Center for Digital Health Interventions (CDHI),** *Doctoral Researcher* **Zurich, Switzerland**
- Developing a smartwatch-based machine learning method for emotion recognition among couples

2017-2018 **Dartmouth Computer Science Department,** *Research Scientist* **Hanover, U.S.**
- Developed wearable apps for monitoring cardiovascular and strength-training exercises of older obese adults

2016-2017 **Dartmouth mHealth Security & Privacy Lab,** *Research Assistant* **Hanover, U.S.**
- Developed a stress detection machine learning model that achieved 95% classification accuracy

Spring 2016 **Dartmouth Computational Epi-Informatics (CIEL) Lab,** *Research Assistant* **Hanover, U.S.**
- Built a text classifier that assigned clinical trials to 58 lay-friendly categories with 95% accuracy

Fall 2014 **Dartmouth Ice Research Laboratory***, Research Assistant* **Hanover, U.S.**
- Soldered and surface-mounted components onto a PCB for a controller system to transport sea ice from the Arctic

2013-2014 **Dartmouth Robotics Laboratory***, Research Assistant* **Hanover, U.S.**
- Designed with SolidWorks and 3D printed fixtures that automatically tied a square knot without the use of sensors
- Built a simulation of magnetic manipulation of an object in 1D using Processing

WORK EXPERIENCE

Jan 2022 - Now **SuaCode.ai, Inc,** *Cofounder and CEO* **Zurich, Switzerland**
- Cofounded and lead an EdTech AI startup to democratize coding education across Africa using smartphones
- Oversee the development of our SuaCode mobile app and Kwame AI web app

Aug - Nov 2021 **Amazon Inc,** *Applied Scientist* **Cambridge, U.S.**
- Worked in the Alexa Edge Machine Learning (Alexa AI) team where I developed a system for sarcasm detection

Fall 2015 **Digital Arts, Leadership & Innovation (DALI) Lab,** *Project Manager/Developer* **Hanover, U.S.**
- Led a team of 3 developers and 1 designer to develop an iOS version of my tutor-matching app, *Adesua*

Summer 2015 **Sapho (Acquired by Citrix),** *Software Engineer* **San Francisco, U.S.**
- Implemented iOS push notification feature in backend code and fixed frontend and backend bugs in the codebase

TEACHING EXPERIENCE

2018-2021 **SuaCode,** *Instructor* **Zurich, Switzerland**
- Created an "Introduction to Coding" course which I delivered in 4 online cohorts (2000+ students in total)

2018-2021 **ETH Zurich,** *Teaching Assistant* **Zurich, Switzerland**
- Assisted with the teaching of a master's class, Mastering Digital Business Models (300+ students total)
- Created and graded exercises, projects, and examination questions
- Gave lectures on various topics

Summer 2019 **Project iSWEST 2019,** *Lead Facilitator* **Accra, Ghana**
- Ran STEM summer program and taught "Coding"
- Mentored 25 students to develop 6 digital health innovations to solve problems in Ghana

2015-2018 **Dartmouth Emerging Engineers (DEE) Program***, Engineering Coach* **Hanover, U.S.**
- Tutored introductory Computer Science & Engineering classes
- Mentored freshmen interested in studying Engineering

2015-2016	**Tutor Clearinghouse,** *Tutor*	**Hanover, U.S.**

- Tutored Computer Science & Engineering classes

Summer 2014	**Project iSWEST 2014,** *Facilitator*	**Accra, Ghana**

- Ran STEM summer program and taught "Innovation and Entrepreneurship"
- Mentored 15 students to develop 3 devices to solve problems in Ghana

Winter 2013	**CoderDojo**, *Volunteer Tutor*	**Hanover, U.S.**

- Taught computer programming to middle school students near Dartmouth's campus

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MENTORING / CO-SUPERVISING EXPERIENCE

2021 - 2022	**Xiangyu Zhao**	**TU Munich**

- Master's Thesis: "Emotion Recognition among Couples"

2022	**Madhav Sachdeva**	**University of Zurich**

- Master's Thesis: "Emotion Recognition in Couples using Transfer Learning: A Multimodal Approach"

2021 - 2022	**Marine Hoche**	**ETH Zurich**

- Master's project: Speaker diarization and identification of couple's conversation with multimodal smartwatch data

TALKS/LECTURES/INTERVIEWS

- Breaking Africa's Coding Barrier with Smartphones and AI, ***ETH Zurich, Switzerland, (October 2022)***
- Multimodal Emotion Recognition among Couples in Daily Life using Smartwatches, [link], ***Center for Technology and Behavioral Health | Geisel School of Medicine at Dartmouth College, (October 2022)***
- Leveraging Mobile Devices and AI to Democratize Science and Computing Education in Africa, ***Google Ghana (July 2022)***
- Prêt-à-porter? Is Wearable Health Tech the Panacea for Better Outcomes?, ***Dartmouth College, (May 2022)***
- SuaCode Africa 2.0: Teaching Coding Online to Africans using Smartphones during COVID-19 [link], ***ETH Zurich, Switzerland, (January 2021)***
- Learning to Code with your Smartphone with George Boateng [link], ***Tech Confab with Joel Budu (June 2020)***
- Internet 2.0 & 3.0 Business Models, ***ETH Zurich, Switzerland, (November 2019)***
- Internet 1.0 Business Models, ***ETH Zurich, Switzerland, (October 2019)***
- Cultivating Young Minds for Digital Health Innovations in Ghana, ***ETH Zurich, Switzerland, (August 2019)***
- Spurring an Innovation Revolution in Africa — The Nsesa Story, ***Accra Ghana (January 2019)***

LEADERSHIP

2014-Present	**Nsesa Foundation,** *Cofounder and President*	**Accra, Ghana**

- Cofounded and lead an education nonprofit to spur an "Innovation Revolution" in Africa
- Lead a team of 7 people across 4 countries and 3 continents to run Nsesa's 4 programs — Project iSWEST, SuaCode, STEM WOW
- Created Project iSWEST, an innovation bootcamp that has impacted over 200 students in Ghana
- Created SuaCode, a smartphone-based coding course that has impacted over 2000 students across 69 countries
- Created STEM WOW, a weekly celebration of African women in STEM that has celebrated 106 women from 23 countries with a reach of over 500,000 on Facebook

2021-Present	**Thayer School of Engineering at Dartmouth College,** *Dean's Council Member*	**Hanover, U.S.**

- Serving on the Diversity, Equity, and Inclusion (DEI) working group

2019-Present	**Dartmouth College,** *Admissions Ambassador*	**Hanover, U.S.**

- Interviewed 1 applicant to Dartmouth College class of 2025 in 2021
- Interviewed 2 applicants to Dartmouth College class of 2024 in 2020
- Interviewed 3 applicants to Dartmouth College class of 2023 in 2019

AWARDS & HONORS

- Africa Prize for Engineering Innovation 2022 Alumni Grant [link] — £ 15,000 **(August 2022)**
- Winner, University of Cambridge Africa Future Pitch **[**link**] —** £ 2,000 **(May 2022)**
- IBM New Creator [link] **(May 2022)**
- GSV Cup Elite 200 [link] **(January 2022)**
- ETH MTEC Foundation Grant [link]— CHF 30,000 **(December 2021)**
- Finalist, Building a Sustainable Future — ETH SDG Pitch Event **(November 2021)**
- ETH for Development Research to Action Grant Awardee [link] - CHF 5,000 **(July 2021)**
- Pioneer, 2021 MIT Technology Review 35 Innovators Under 35 [link] **(June 2021)**
- Verizon-CGIU 2021 Social Innovation Challenge Semi-Finalist **(April 2021)**
- Africa Prize for Engineering Innovation Shortlist by the U.K.'s Royal Academy of Engineering [link] **(February 2021)**
- 4th Place (14 competitors), ComParE InterSpeech 2020 Challenge on Elderly Emotion Recognition **(October 2020)**
- Princeton Africa Summit Venture Competition Finalist [link] **(October 2020)**
- Processing Foundation 2020 Fellowship Mentor [link] **(March 2020)**
- Heidelberg Laureate Forum Young Researcher **(September 2019)**
- African Union (AU) Education Innovation Prize — $5,000 [link] **(August 2019)**
- Processing Foundation 2019 Fellowship Mentor [link] **(April 2019)**
- ETH Zurich Summer School in Computational Social Science Participant [link] **(June 2019)**
- Dartmouth College Magnuson Center for Entrepreneurship Founder Grant - $2,500 **(April 2018)**
- Processing Foundation Fellow [link] **(March 2018)**
- Rev. Dr. Martin Luther King Jr. Social Justice Award in Emerging Leadership [link] **(January 2018)**
- Finalist, Milken-Penn GSE Education Business Plan Competition - Idea Path [link] **(October 2017)**
- Thayer School of Engineering Dean's Service Award [link] **(June 2017)**
- Ernest Everett Just Award in Mathematics and the Sciences [link] **(June 2016)**
- Neukom Prize for Outstanding Undergraduate Research in Computational Science for my thesis [link] **(June 2016)**
- Social and Economic Justice Prize and 3rd Place at HackNSBE 2016 for my team's app *NoLimit* **(Winter 2016)**
- Casque and Gauntlet (C&G) Senior Society **(Fall 2016)**
- Ernest Everett Just Innovator Award for my app *Adesua* **(Fall 2015)**
- Best Real World Application Prize by Palantir at HackDartmouth for my team's app *NeuroAlert* **(Spring 2015)**
- Sophomore Science Scholar & Neukom Scholar termly research grant **(2013 - 2015)**
- ISTS/Neukom Institute & Thayer School of Engineering grants to run a STEM program **(Summer 2014)**
- Dartmouth Entrepreneurial Network (DEN) in Residence Program **(Fall 2014)**
- 1 of 4 winners out of 21 competitors for a 2-minute pitch competition with my project *SpeedAlert!* [link] **(Fall 2014)**
- Clinton Global Initiative University (CGI U) Meeting Delegate [link] **(Fall 2014, 2015)**
- Congratulation by President Bill Clinton for winning the inaugural CGI U Codeathon for *MediText* [link] **(Spring 2014)**
- Goldman Sachs Undergraduate Camp Participant **(Summer 2013)**
- Dartmouth College Civic Skills Trainee [link] **(Summer 2013)**

TRAVEL GRANTS

- NSF, ACM International Conference on Mobile Computing and Networking (MobiCom 2019)
- Black in AI, International Conference on Neural Information Processing Systems (NeurIPS 2019, 2018)
- NSF, IEEE International Conference on Pervasive Computing and Communications (PerCom 2017)
- Neukom Institute, IEEE International Conference on Pervasive Computing and Communications (PerCom 2017)
- Neukom Institute, Society of Hispanic Engineers Conference (SHPE 2016)
- Magnuson Center for Entrepreneurship, Clinton Global Initiative conference (CGI U 2015)
- Dickey Center, Clinton Global Initiative conference, (CGI U 2014)

SOFTWARE & EMBEDDED SYSTEMS PROJECTS

- *NoLimit*, a web app with crowdsourced accessibility-specific reviews of locations, in a team of 4 **(Winter 2016)**
- *ReachOut,* an app that enables students to reach out when depressed or stressed, in a team of 6 **(Winter 2016)**
- *Let's GAM,* an app that automatically schedules a meal between 2 people with a shake of their phones **(Fall 2015)**
- *Adesua,* an app that matches students in need of tutoring with tutors, with just a tap of a button **(Summer 2015)**
- *NeuroAlert*, an app that uses brainwaves to detect when a person is falling asleep, in a team of 4 **(Spring 2015)**
- *GesturePong,* a gesture-controlled pong game using the Leap Motion controller (**Winter 2015)**

- *MediText,* an SMS-based service that reminds patients to take their drugs, in a team of 4 **(Spring 2014)**

COMMUNITY INVOLVEMENT & ACTIVITIES
- Reviewer, ACM International Conference on Multimodal Interaction (ICMI), 2021
- Reviewer, ACM Transactions on Computing for Healthcare (HEALTH), 2019
- Reviewer, European Conference on Information Systems (ECIS), 2019

PROFESSIONAL SOCIETIES
- Institute of Electrical and Electronics Engineers (IEEE)
- Association for Computing Machinery (ACM)
- National Society of Black Engineers (NSBE)
- International Speech and Communication Association (ISCA)

PERSONAL
- **Technical Skills:** C, Java, Python, JavaScript, Bash Scripting, Android, Scikit-learn, Keras, MATLAB, SolidWorks
- **Languages:** English, French (Intermediate), German (Beginner), Fante & Twi (Native languages)
- **Devices:** ARM Cortex-M4, PIC32, Arduino, Leap Motion, Myo Armband, Muse Headband, FLIR Thermal Sensor
- **Interests:** Playing the piano and djembe, writing grant letters, playing soccer, reading tech news, watching movies

PUBLICATIONS (TOTAL - 31 PEER-REVIEWED)

1. **George Boateng,** Daniel Bone, Victor Rogzic, and Chao Wang. Towards Multimodal Sarcasm Detection in Conversational Speech: Modeling Linguistic Incongruity via Metric Learning (in preparation).

2. **George Boateng,** Xiangyu Zhao, Malgorzata Speichert, Elgar Fleisch, Janina Lüscher, Theresa Pauly, Urte Scholz, and Tobias Kowatsch. ""Are you okay, honey?": Recognizing Emotions of Couples Managing Diabetes in Daily Life using Multimodal Smartwatch Data. In ACM Interact. Mob. Wearable Ubiquitous Technol (under review). http://arxiv.org/abs/2208.08909 (2022)

3. **George Boateng,** Prabhakaran Santhanam, Elgar Fleisch, Janina Lüscher, Theresa Pauly, Urte Scholz, and Tobias Kowatsch. "Development, Deployment, and Evaluation of DyMand--An Open-Source Smartwatch and Smartphone System for Capturing Couples' Dyadic Interactions in Chronic Disease Management in Daily Life." In ACM Interact. Mob. Wearable Ubiquitous Technol (under review) https://arxiv.org/abs/2205.07671 (2022).

4. **George Boateng,** Elgar Fleisch, Tobias Kowatch. "Emotion Recognition among Couples: A Survey". ACM Computing Surveys (under review). Arxiv link: https://arxiv.org/abs/2202.08430

5. **George Boateng**, Samuel John, Andrew Glago, Samuel Boateng, Victor Kumbol. *"Kwame for Science: An AI Teaching Assistant Based on Sentence-BERT for Science Education in West Africa"*. In 4th Workshop on Intelligent Textbooks (iTextbooks) co-located with the 23rd International Conference on Artificial Intelligence in Education (AIED '22), July 27th Durham, U.K. Link

6. **George Boateng,** Curtis L. Petersen, David Kotz, Karen L. Fortuna, Rebecca Masutani, and John A. Batsis. "Smartwatch Step-Counting App for Older Adults: Development and Evaluation Study". JMIR Aging;5(3):e33845. 2022. https://doi.org/10.2196/33845

7. **George Boateng,** Peter Hilpert, Guy Bodenmann, Mona Neysari, Tobias Kowatsch. ""You made me feel this way": Investigating Partners' Influence in Predicting Emotions in Couples' Conflict Interactions using Speech Data". In *Companion Publication of the 2021 International Conference on Multimodal Interaction (ICMI '21 Companion),* October 18–22, 2021, *Montréal, QC, Canada*. ACM, New York, NY, USA, 5 pages. https://doi.org/10.1145/3461615.3485424

8. Jacopo Biggiogera, **George Boateng,** Peter Hilpert, Matthew Vowels, Guy Bodenmann, Mona Neysari, Fridtjof Nussbeck, Tobias Kowatsch. "BERT meets LIWC: Exploring State-of-the-Art Language Models for Predicting Communication Behavior in Couples' Conflict Interactions". In *Companion Publication of the 2021 International Conference on Multimodal Interaction (ICMI '21 Companion), October 18–22, 2021, Montréal, QC, Canada.* ACM, New York, NY, USA, 5 pages. https://doi.org/10.1145/3461615.3485423

9. **George Boateng**, Prince Steven Annor, and Victor Kumbol. "SuaCode Africa: Teaching Coding Online to Africans using Smartphones. The 10th Computer Science Education Research Conference (CSERC '21), November 22--23, 2021, Virtual Event, Netherlands. https://doi.org/10.1145/3507923.350792

10. Annor, Prince Steven, Samuel Boateng, Edwin Pelpuo Kayang, and **George Boateng**. "AutoGrad: Automated Grading Software for Mobile Game Assignments in SuaCode Courses. The 10th Computer Science Education Research Conference (CSERC '21), November 22--23, 2021, Virtual Event, Netherlands. https://doi.org/10.1145/3507923.3507954

11. **George Boateng**. "Kwame: A Bilingual AI Teaching Assistant for Online SuaCode Course". *In International Conference on Artificial Intelligence in Education,* 2021*,* pp. 93-97. Springer, Cham, 2021. https://doi.org/10.1007/978-3-030-78270-2_16

12. Samuel John and **George Boateng**. ""I didn't copy his code": Code Plagiarism Detection with Visual Proof". *In International Conference on Artificial Intelligence in Education*, pp. 208-212. Springer, Cham, 2021. https://doi.org/10.1007/978-3-030-78270-2_37

13. Roza G. Kamiloğlu, **George Boateng,** Alisa Balabanova, Chuting Cao, and Disa A. Sauter. "Superior communication of positive emotions through nonverbal vocalisations compared to speech prosody". *Journal of Nonverbal Behavior, (2021): 1-36.* https://doi.org/10.1007/s10919-021-00375-1

14. **George Boateng.** "Kwame: A Bilingual AI Teaching Assistant for Online SuaCode Courses." *Black in AI workshop, at the 34th Annual Conference on Neural Information Processing Systems (NeurIPS), December 6-12, 2020, Virtual Event, Canada*

15. **George Boateng.** "Towards a wearable system for assessing couples' dyadic interactions in daily life." *In Adjunct Proceedings of the 2020 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2020 ACM International Symposium on Wearable Computers,* pp. 208-211. 2020. https://doi.org/10.1145/3410530.341433

16. **George Boateng.** 2020. Towards Real-Time Multimodal Emotion Recognition among Couples. In *Proceedings of the 2020 International Conference on Multimodal Interaction (ICMI '20), October 25–29, 2020, Virtual event, Netherlands.* https://doi.org/10.1145/3382507.3421154

17. **George Boateng** and Tobias Kowatsch. 2020**.** Speech Emotion Recognition among Elderly Individuals using Transfer Learning. In *Companion Publication of the 2020 International Conference on Multimodal Interaction (ICMI '20 Companion), October 25–29, 2020, Virtual event, Netherlands.* https://doi.org/10.1145/3395035.3425255

18. **George Boateng,** Laura Sels, Peter Kuppens, Peter Hilpert, Urte Scholz, and Tobias Kowatsch. 2020. Speech Emotion Recognition among Couples using the Peak-End Rule and Transfer Learning. In *Companion Publication of the 2020 International Conference on Multimodal Interaction (ICMI '20 Companion), October 25–29, 2020, Virtual event, Netherlands.* https://doi.org/10.1145/3395035.3425253

19. **George Boateng,** Laura Sels, Peter Kuppens**,** Janina Lüscher, Urte Scholz, and Tobias Kowatsch. 2020. Emotion Elicitation and Capture among Real Couples in the Lab. In *1st Momentary Emotion Elicitation & Capture workshop (MEEC 2020), co-located with the ACM CHI Conference on Human Factors in Computing Systems. 2020.* https://doi.org/10.3929/ethz-b-000403788

20. **George Boateng,** Janina Lüscher, Urte Scholz, and Tobias Kowatsch. 2020. Emotion Capture among Real Couples in Everyday Life. Momentary Emotion Elicitation. In *1st Momentary Emotion Elicitation & Capture workshop (MEEC 2020), co-located with the ACM CHI Conference on Human Factors in Computing Systems. 2020.* https://doi.org/10.3929/ethz-b-000403789

21. **George Boateng,** Vivian Genaro Motti, Varun Mishra, John A. Batsis, Josiah Hester, and David Kotz. Experience: Design, Development and Evaluation of a Wearable Device for mHealth Applications. In *Proceedings of The 25th Annual International Conference on Mobile Computing and Networking (MobiCom)*, October 2019. https://doi.org/10.1145/3300061.3345432

22. **George Boateng,** Prabhakaran Santhanam, Janina Lüscher, Urte Scholz, and Tobias Kowatsch. 2019. Poster: DyMand – An Open- Source Mobile and Wearable System for Assessing Couples' Dyadic Management of Chronic Diseases. In *Proceedings of The 25th Annual International Conference on Mobile Computing and Networking, Los Cabos, Mexico, October 21–25, 2019 (MobiCom '19),* 3 pages. https://doi.org/10.1145/3300061.3343399

23. **George Boateng**, Prabhakaran Santhanam, Janina Lüscher, Urte Scholz, and Tobias Kowatsch. 2019. VADLite: An Open-Source Lightweight System for Real-Time Voice Activity Detection on Smartwatches. In Adjunct Proceedings of the 2019 ACM International Joint Conference on Pervasive and Ubiquitous Computing and the 2019 International Symposium on Wearable Computers (UbiComp/ISWC '19 Adjunct), September 9–13, 2019, London, United Kingdom. ACM, New York, NY, USA, 5 pages. https://doi.org/10.1145/3341162.3346274

24. **George Boateng,** Prabhakaran Santhanam, Janina Lüscher, Urte Scholz, Tobias Kowatsch. DyMand: An Open-Source Mobile and Wearable System for Assessing Couples' Dyadic Management of Chronic Diseases. The *14th International Conference on Design Science Research in Information Systems and Technology (DESRIST 2019)*, June 4-6, 2019, Worcester, MA, USA. Link

25. **George Boateng,** Victor Wumbor-Apin Kumbol, and Prince Steven Annor. 2019. Keep Calm and Code on Your Phone: A Pilot of SuaCode, an Online Smartphone-Based Coding Course. *In Proceedings of the 8th Computer Science Education Research Conference Larnaca, Cyprus (CSERC '19), November 18–20, 2019, Larnaca, Cyprus.* ACM, New York, NY, USA, 6 pages. https://doi.org/10.1145/3375258.3375260

26. Janina Lüscher, Tobias Kowatsch, **George Boateng**, Prabhakaran Santhanam, Guy Bodenmann, Urte Scholz. Social Support and Common Dyadic Coping in Couples' Dyadic Management of Type II Diabetes: Protocol for an Ambulatory Assessment Application. JMIR research protocols. 2019;8(10):e13685. https://doi.org/10.2196/13685

27. John A. Batsis, **George G. Boateng**, Lillian M. Seo, Curtis L. Petersen, Karen L. Fortuna, Emily V. Wechsler, Ronald J. Peterson, Summer B. Cook, Dawna Pidgeon, Rachel S. Dokko, Ryan J. Halter, and David F. Kotz. Development and Usability Assessment of a Connected Resistance Exercise Band Application for Strength-Monitoring. *International Journal of Mechanical Mechatronics Engineering 2019*; 13(5). Link

28. John A. Batsis, Alexandra B. Zagaria, Ryan J. Halter, **George G. Boateng**, Patrick Proctor, Stephen J. Bartels, and David Kotz. Use of the Amulet in Behavioral Change for Geriatric Obesity Management. *Journal of Digital Health*, May 2019. https://doi.org/10.1177/2055207619858564

29. **George Boateng,** Prabhakaran Santhanam, Janina Lüscher, Urte Scholz, Tobias Kowatsch. Multimodal Affect Detection among Couples for Diabetes Management, Poster presented at the *Black in AI Workshop* at the *32nd Annual Conference on Neural Information Processing Systems (NeurIPS)*, December 7, 2018, Montreal, Canada. https://doi.org/10.3929/ethz-b-000312652

30. **George Boateng,** John A. Batsis, Patrick Proctor, Ryan Halter, and David Kotz. GeriActive: Wearable App for Monitoring and Encouraging Physical Activity among Older Adults. In *Proceedings of the IEEE Conference on Body Sensor Networks (BSN)*, pages 46-49, March 2018. IEEE. https://doi.org/10.1109/BSN.2018.8329655

31. **George Boateng** and Victor Kumbol. Project iSWEST: Promoting a culture of innovation in Africa through STEM, In *IEEE Integrated STEM Education Conference (ISEC),* Princeton, NJ, USA, 2018, pp. 104-111. https://doi.org/10.1109/ISECon.2018.8340459

32. Curtis L. Petersen, Emily V. Wechsler, Ryan J. Halter, **George G. Boateng**, Patrick O. Proctor, David F. Kotz, Summer B. Cook, and John A. Batsis. Detection and Monitoring of Repetitions Using an mHealth-Enabled Resistance Band. In *IEEE/ACM International Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE)*, pages 21-23, September 2018. https://doi.org/10.1145/3278576.3278586

33. John A. Batsis, Alexandra Zagaria, David F. Kotz, Stephen J. Bartels, **George G. Boateng**, Patrick O. Proctor, Ryan J. Halter, and Elizabeth A. Carpenter-Song. Usability evaluation for the Amulet wearable device in rural older adults with obesity. *Gerontechnology*, 17(3):150-158, 2018. https://doi.org/10.4017/gt.2018.17.3.003.00

34. **George Boateng,** John A. Batsis, Ryan Halter, and David Kotz. ActivityAware: An App for Real-Time Daily Activity Level Monitoring on the Amulet Wrist-Worn Device. In *Proceedings of the IEEE PerCom Workshop on Pervasive Health Technologies (PerHealth)*, pages 431-435, March 2017. IEEE. https://doi.org/10.1109/PERCOMW.2017.7917601

35. **George Boateng** and David Kotz. StressAware: An App for Real-Time Stress Monitoring on the Amulet Wearable Platform. In *MIT Undergraduate Research Technology Conference (URTC)*, January 2017. IEEE, 2016. https://doi.org/10.1109/URTC.2016.8284068

PRESS COVERAGE

- George Boateng has successfully defended his PhD!, *CDHI, ETH Zurich (September 2022)*
- Ghanaians Abroad: George in Switzerland, *AKADi Magazine (September 2022)*
- Coding Crusader: George Boateng '16 TH'17, *Dartmouth Engineer Magazine (Spring 2022)*
- Ghanaian designs AI web app to provide instant answers on Science, *Citi Newsroom (June 2022)*
- George Boateng: Applying AI to democratize education in Africa , *IBM (May 2022)*

- [Former Amazon intern George Boateng is using machine learning and mobile tech to bridge Africa's digital divide](), ***Amazon Science (May 2022)***
- [Smart Coding: Tech innovator George Boateng '16, TH '17 closes Africa's digital gap](), ***Dartmouth Alumni Magazine (January 2022)***
- [Group of Ghanaian entrepreneurs create coding app to democratise science and technology in Africa](), ***MyJoyOnline (January 2022)***
- [SuaCode: learn to code on your smartphone](), ***Futurum Careers (January 2022)***
- [Ghanaian Computer Scientist George Boateng Develops Smartphone-Based Coding App SuaCode](), ***Yen.com.gh (January 2022)***
- [George Boateng: An African Tech Pioneer in Switzerland](), ***ETH Zurich (December 2021)***
- [George Boateng's Research is Improving the Lives of Others](), ***Dartmouth College (August 2021)***
- [First ETH4D Research to Action Projects](), ***ETH for Development (July 2021)***
- [George Jojo Boateng: 28-year-old Ghanaian Innovator Named in MIT Technology Review Innovators Under 35 list](), ***Yen.com.gh (July 2021)***
- [CDHI PhD candidate George Boateng named as one of this year's MIT Technology Review's 35 Innovators Under 35](), ***CDHI (July 2021)***
- [35 Innovators Under 35: George Boateng - He built a smartphone-based platform to teach young people to code— and tackle Africa's IT skills gap in the process](), ***MIT Technology Review (June 2021)***
- [George Boateng: Developing AI Tools To Revolutionize Education Across Africa](), ***Kuulpeeps (June 2021)***
- [Ghana's artificial intelligence sector booming](), ***DW TV (June 2021)***
- [George Boateng has been shortlisted for the 2021 Africa Prize for Engineering Innovation](), ***CDHI (April 2021)***
- [Two Ghanaian innovators shortlisted for 2021 Africa Prize for Engineering Innovation](), ***GhanaWeb (March 2021)***
- [Academy recognises the entrepreneurial innovators shaping Africa](), ***U.K. Royal Academy of Engineering (February 2021)***
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