

Name: Corey E. Baker

Position Title & Institution: Assistant Professor, University of Kentucky

Website: cs.uky.edu/~baker

A. Professional Preparation

San Jose State University, San Jose, CA	Computer Engineering	BS 2008
California State University Los Angeles, CA	Electrical & Computer Engineering	MS 2010
University of Florida, Gainesville, FL	Computer Engineering	MS 2012
University of Florida, Gainesville, FL	Computer Engineering	PhD 2015

B. Appointments Academic

Jan 2018 – Present	Assistant Professor, Department of Computer Science, University of Kentucky, Lexington, KY
July 2017 – Dec. 2017	Visiting Scholar, Department of Electrical Engineering, University of Southern California, Los Angeles, CA
Aug. 2015 – Dec. 2017	UC Presidents Postdoc Fellow, Department of Electrical & Computer Engineering, University of California San Diego, La Jolla, CA
Jan. 2011 – Aug. 2015	Research Assistant, Wireless and Mobile Systems Laboratory, University of Florida, Gainesville, FL
Feb. 2009 – May 2010	Research Assistant, Brain and Body Dynamics Laboratory, University of Southern California, Los Angeles, CA
Feb. 2009 – Aug. 2009	Research Assistant, Neuroengineering Technology Laboratory, California State University Los Angeles, Los Angeles, CA

Industry

Oct 2012 – Jan. 2013	RF Architecture Intern, Intel, Santa Clara, CA
May 2012 – Aug. 2012	Graduate Intern, Intel, Santa Clara, CA
Jun. 2010 – Aug. 2010	Software Engineer Graduate Intern, Intel, Santa Clara, CA
Feb. 2007 – Aug. 2008	Software Engineer Intern, Hewlett Packard, Cupertino, CA
Aug. 2006 – Feb. 2007	Database Administrator, NASA AMES Research Center (ISSI Contractor) Moffett Field, CA
Jun. 2006 – Aug. 2006	Firmware Engineer Intern, Hewlett Packard, Vancouver, WA

C. Products

Products Most Related to the Proposed Project

1. Madamari O, Max-Onakpoya E, Erhardt G, **Baker CE**, “Enabling opportunistic low-cost smart cities by using tactical edge node placement”, IEEE Wireless On-demand Network systems and Services Conference (WONS), 2021 (Accepted – In Press)
2. Max-Onakpoya E, Madamari O, Grant F, Vanderpool R, Chih M.-Y, Ahern D.K, Aronoff-Spencer E, **Baker CE**, “Augmenting Cloud Connectivity with Opportunistic Networks for Rural Remote Patient Monitoring”, IEEE International Conference on Computing, Networking and Communications (ICNC), 2020
3. **Baker C**, Almodovar-Faria J, and McNair J, “Ad-hoc social network (ahsn) system, ahsn-enabled device, and methods of use”, US Patent, US10,694,362, 2020
4. Starke A, Nie Z, Hodges M, **Baker C**, and McNair J, “Denial of Service Detection & Mitigation Scheme Using Responsive Autonomic Virtual Networks”, IEEE MILCOM, 2019
5. **Baker CE**, Starke A, Hill-Jarrett T, and McNair J, “In Vivo Evaluation of the Secure Opportunistic Schemes Middleware Using a Delay Tolerant Social Network”, IEEE ICDCS, 2017

Other Significant Products

1. Hesse BW, Ahern D, Ellison M, Vanderpool RC, Onyeije K, Gibbons MC, Mullett TW, Chih M, Attencio V, Patterson G, Boten J, Hartshorn C, Bartolome B, Gorscak K, McComsey M, Hubenko A, Huang B, **Baker C**, and Norman D, "Barn-Raising on the Digital Frontier: The L.A.U.N.C.H Collaborative," Journal of Appalachian Health, Vol. 2, Issue 1, 2020
2. Donawa A, Orukari I, and **Baker C**, "A Scalable Blockchain Solution for Electronic Health Records", IEEE UEMCON, 2019
3. Madamari O, Max-Onakpoya E, Grant C, **Baker CE**, "Using Delay Tolerant Networks as a Backbone for Low-cost Smart Cities", IEEE International Conference on Smart Computing (SmartComp), 2019
4. Max-Onakpoya E, Madamari O, **Baker CE**, "Utilizing Opportunistic Social Networks for Remote Patient Monitoring in Rural Areas", ACM International Workshop on Technology Enablers and Innovative Applications for Smart Cities (TESCA), 2019
5. Max-Onakpoya E, Jacobs A, and **Baker CE**, "Application design considerations for remote patient monitoring using healthkit and iOS," ACM International Workshop on Mobile Computing Systems and Applications (HotMobile), Santa Cruz, CA, 2019

D. Synergistic Activities

1. Developed the Graduate Student Campus Visit Program in the UK College of Engineering, which led to the Department of Computer Science recruiting the largest number of black doctoral students in its history and for which I was awarded the 2019 Inclusive Excellence Award for faculty at UK.
2. Featured in the NBC News Learn feature "Discovering You: Engineering Your World", which aired on February 8, 2019 and is available at www.nbclearn.com. The segment highlights my career path and current research in my lab, and incorporates a STEM lesson plan for grades 6-8, "Investigating Distance Communication to Become a Great Engineer."
3. Have held leadership and advising positions at the regional and national levels for the National Society of Black Engineers since 2008.
4. Delivered 15 workshops from 2015 to 2017 to primarily underrepresented high school, undergraduate and graduate students on applying to engineering schools and preparing for academia and industry careers, through the National GEM Consortium, National Society of Black Engineers, TRiO Programs.
5. Travel Grants Chair for ACM International Workshop on Mobile Computer Systems and Applications (HotMobile 2020).