

### contact.





## education.

University of California Berkeley Masters of Science Energy and Resources (2014) PhD expected May 2017

The University of Michigan Bachelor of Science Aerospace Engineering (2012) Summa Cum Laude

Morehouse College Bachelor of Science Applied Physics (2012) Summa Cum Laude Minor in Mathematics

# Pierce Edward 🔅 Cornelius Gordon.

## curriculum vitae.

## profile.

Designer, researcher, consultant, at your service. I work to develop questions, concerns, and topics in the evaluation and critique human centered design of tangible technological interventions for the multidimensionally poor, including:

Innovation /Design Thinking Community Development/Development Engineering Program Evaluation Participatory design/Designer-user intimacy Social Entrepreneurship Design Pedagogy

## publications/presentations.

Publications:

Staton, B, Kramer, J, Gordon, P. Valdez, L. "From the Technical to the Political: Democratizing Design Thinking." Congreso International No. 4: Contested Cities 2016.

Gordon, P. E. C. (2014). Design Thinking For the Poor: A Comparative Content Analysis of Development Challenges in OpenIDEO. ERG Master's Paper.

Gordon, P. E. C., Fuge M., Agogino, A.. "Examining Design for Development Online: A Qualitative Analysis of OpenIDEO using HCD/UCD Metrics." ASME IMECE 2014 Conference.

Gordon, P. E. C., Colozza, A. J., Hepp, A. F., Heller, R. S., Gustafson, R., Stern, T., et al. (2011). Thermal Energy Process Heat for Lunar ISRU: Technical Challenges and Technology Opportunities. 49th AIAA Aerospace Sciences Meeting (pp. 1-22). Orlando, Fl: AIAA. doi: AIAA 2011-704. NASA/TM-2011-217114.

Gordon, P. E. C. (2008). SPHERES Control of Attitude Control System using Reaction Wheels. Control (pp. 1-11). Cambridge, MA. Retrieved from http://ssl.mit.edu/spheres/papers.html.

## related coursework.

Design, Evaluate and Scale Development Technologies (DEV200) Innovation through Design Thinking (ME290KA)

Impact Evaluation for Health Professionals (HLTH235)

Business Strategies for Emerging Markets (MBA215)

Development in Theory and History (DS100)

Design for Sustainable Communities (CE209)



## awards, honors, fellowships, scholarships.

UC Berkeley Chancellor's Fellow

NSF Graduate Research Fellow

University Honors, The University of Michigan

Dean's List, Morehouse College AND The University of Michigan

Most Outstanding Dual Degree Student, AUC DDEP Banquet

ist Place, NSBE National Technical Research Exhibition

Boeing Scholar, AUC Dual Degree Engineering Program

#### Presentations

Springer, C. H. and Gordon, P. E. C. "The Data and Diversity Project: From Classroom to Campus." Synberc Expanding Potential 2016 Workshop. January 2016.

Gordon, P. E. C. (2014). Examining Design for Development Online: An HCD Analysis of OpenIDEO. Presented at ASME IMECE 2014, Montreal, Québec. November 2014. ERG Master's Presentation, Berkeley, CA. May 2014.

Gordon, P. E. C. Thermal Energy Process Heat for Lunar ISRU: Technical Challenges and Technology Opportunities.

Poster, presented at NASA Glenn Research Center, Cleveland, OH, August 2010, NSBE National Technical Research Exhibition, St. Louis, MO, April 2011, AIAA Aerospace Sciences Meeting, Orlando, FL, Jan. 2011.

Gordon, P. E. C. Electromagnetic Characterization of Xenon Hall Thruster Ion Dynamics.

Committee on Institutional Cooperation's SROP Conference, Ann Arbor, MI, Jul. 2009, Department of Science and Mathematics Interdisciplinary Conference, Morehouse College, Atlanta, GA, November, 2009.

Gordon, P. E. C. Attitude Control System using Reaction Wheels and SPHERES.

MIT Summer Research Program Poster Presentation Conference, Cambridge, Ma, Aug. 2008, Clark-Atlanta University Undergraduate Poster Competition, Atlanta, GA, Sept. 2008, NSBE National Convention Undergraduate Technical Poster Competition, Las Vegas, NV, Apr. 2009.

Gordon, P. E. C. Trap Detector Research at the Low Background Infrared (LBIR) Laboratory. Oral, presented at NIST SURF Program End-of Summer Presentation, Gaithersburg, MD, Aug. 2007, and Morehouse College Oral Research Presentation, Atlanta, GA, Oct. 2007.

## professional endeavors.

Co-Lead Lab Facilitator – Design for Social Impact, BEST Laboratory Mentor and facilitate research for multiple undergraduate students through the Undergraduate Research Apprenticeship program.

Design Thinking for Social Justice – Design Workshop Organizer/-Consultant

Developed a preliminary plan and pedagogical framework towards applying design thinking to social justice issues, to be used in the Oakland context and abroad.

#### Human Needs Project - Energy Analyst

Developed an energy framework for a multidimensional basic needs facility for the community in Kibera, Kenya, using on the ground interviews and exploratory field research for needs assessment. Full Scholarship (room, board, tuition, fees), Morehouse College

Dual Degree Engineering Scholarship, the University of Michigan

Hilton Worldwide Corporate Scholar, National Society of Black Engineers

Harm Buning Scholarship Award, Aerospace Department, The University of Michigan

BP Scholar, AUC Dual-Degree Engineering Program AND The University of Michigan



## memberships.

Tau Beta Pi Engineering Honor Society, Mi-Γ Chapter, The University of Michigan NASA Student Ambassadors Program The Phi Beta Kappa Society, Δ-GA Chapter, Morehouse College Sigma Pi Sigma Physics Honor Society Golden Key International Honour Society



Graduate Student Instructor - Data and Diversity

Developed course plan, network, and resources to run a course which develops a critical space where undergraduates critique, design, and research topics which use collected datasets towards critical diversity issues.

#### DIL Idea Team - Active member

An interdisciplinary group of graduate students who want to help shape the campus dialogue on science and technology for global good. Contributed towards marketing and logistics for DIL Open House, where 100+ interdisciplinary students, professors, and staff gathered for pro-poor engagement on Berkeley.

President – Black Graduate Engineers and Science Students (BGESS)

Developed social and mentoring gathering for the black graduate student community, including BGESS' Science Fair for Cal Tech Day, multiple workshops alongside related black graduate organizations (Blacks in Public Policy, Law Students of African Descent) and BGESS' Chocolate Night.

Marketing Team – Morehouse Bay Area Alumni Association Develop and advertise happy hours, community service, and alumni involvement initiatives for the Bay Area.

Blogger – Berkeley Energy and Resources Collaborative Intermittently blog for BERC on interdisciplinary energy issues.

Sherwood Test Prep – GRE and SAT Test Preparatory Instructor Teach SAT and GRE preparation to classes of 5-18 students.

#### Summer Intern, General Motors

Completed 15-week work assignment concerning manufacturing details necessary for the next generation Corvette.

Required handling of proprietary information concerning novel GM techniques and technology, and travel from Warren, MI to Bowling Green, KY approximately once a month for project specifics.

Compiled and presented findings to executive staff members of Bowling Green Corvette Plant.

#### National Society for Black Engineers (NSBE)

In Atlanta University Center (AUC) as Public Relations Chair: Operated Public Relations committee to publicize multiple successful NSBE events, such as a NSBE Week, the Region 3 Fall Regional Conference, and the NSBE National Convention.

At The University of Michigan as a member of Community Service Committee:

Successfully founded, designed, advertised, wrote grant for, and managed [HelpNSBEHelpHaiti] Initiative, where we collected over 2200+ dollars in donations for a grassroots Haitian organized donation fund called the Croix Marchaterre Project.

Participated and managed multitudinous community service initiatives, such as Adams Elementary Engineering Club, Crisler Arena Cleanup, and University of Michigan Engineering Tech Day.