Antiracist Technology

Instructor: Prof. Kevin M. Passino, Dept. Electrical and Computer Engineering
Contact information: passino.1, mobile: 614-312-2472
Credits: 1
Grading: S/U
Time distribution: 15 weeks, 15 lectures, 55min per lecture

Course Goals: (i) Make students aware of the state of racism in the US, (ii) Show students an approach to antiracist technology development, and (iii) provide an introduction to three research areas in antiracist technology development.

Course Content: The course content includes: (i) an introduction to the state of inequality and racism, (ii) an overview ideas from social justice, (iii) a summary of the major approaches to antiracism, (iv) an introduction to a participatory development methodology for technology, and (v) a presentation of three current research challenges in the area of the development of antiracist technology (supporting community action, policing, transparency/corruption).

Weekly Topical Outline:

Class Topic
1. Introduction: TED talk/interview (51:03): I.X.~Kendi: “The difference between “not-racist” and antiracist”. Assignment: View after class the movie “Coded Bias” (1:30)
2. Introduction: What are anti-poverty technologies? Discussion. Explanation/discussion on one past technology that promoted racism (in the movie Code Bias)
3. World statistics on racism, UN, Pew, World Bank, etc.
4. Social justice, engineering-social justice symmetry, UN Universal Declaration on Human Rights discussion
5. Social justice, relevant perspectives from religious and secular positions
6. Antiracist strategies, demonstration, protest, boycott, discussion. Personal vs.\ collective action, nonviolence vs.\ violence. Discussion: "Think globally, act locally" and “If you want peace, work for justice.”
7. Antiracist Technology: Design methodology 1: The skilled helper, community development
8. Antiracist Technology: Design methodology 2: Participatory community development (respectfully co-creating technology)
9. Antiracist Technology: Design methodology 3: Community assessment, project selection, fieldwork
10. Anti-racist technologies, examples/overview, video (failed past, current success, what to do in the future?)
11. Research Challenge #1: Community action, problem formulation, how to empower people be antiracists
12. Research Challenge #2: Policing/justice, technology for equitable action
13. Research Challenge #3: Transparency/corruption, how to make radical changes
14. Research Challenge #X: Brainstorming on other options in class
15. Challenges of technology misuse, feasibility, cost, robustness/ruggedness, sustainability and the environment, scale-up.

Homework Assignments, Percent Weighting:

1. Summary and critique of Kendi video, at TED talk of their choice (but approved by instructor): 20%
2. Develop racism/inequality statistics for the US and a country of your choice, compare: 20%
3. Summary and critique of Kendi textbook, 25% (assigned the first day)
4. “Paper design” of one antiracist technology (topic must be approved by the instructor) 35%

Required Textbook:


Academic Misconduct:

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

Students with Disabilities:

Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614-292-3307, slds@osu.edu; slds.osu.edu.

Biography:

Kevin M. Passino is a Professor in Electrical and Computer Engineering at OSU. His research focuses on the design of technologies that alleviate poverty, and fight racism, especially those that use distributed dynamical systems, feedback control, stability, and optimization methods. He has won the Dept. of Electrical Engineering, Eta Kappa Nu student-run teaching award. He is
an OSU Sphinx and Mortar Board Senior Class Honoraries Outstanding Faculty Member. He is a recipient of the Boyer Award for Excellence in Teaching Innovations in the College of Engineering. He is an OSU Distinguished Scholar and won the College of Engineering Scott Award. He has taught several undergraduate courses, including ENGR 5050 Humanitarian Engineering, ECE 5550 Computational Humanitarianism, ECE 3080 Engineering Ethics, and ECE 4/5759 Optimization. He is the faculty advisor for the OSU student organization “Engineers for Community Service” and “Code 4 Community”.