October 24, 2016

#### Dear Tobi:

I hope you are continuing to work hard during your senior year and are making the most of your experience in the MIT Online Science, Technology, and Engineering Community. MOSTEC has one-of-a-kind opportunities for you to hone your interests in science and engineering with a group of high achieving peers and accomplished, dedicated mentors from across the country.

Enclosed is your copy of your MOSTEC Project Course Final Evaluations. These evaluations assess your performance in your project courses and describe some of your strengths and areas to improve upon.

Please take time to reflect on these recommendations during the remainder of your senior year in high school. If you receive constructive feedback, take a deep breath and think about how you can continue to improve in the areas noted. In so doing, you will be better prepared to perform at the highest levels in college.

We encourage you to share your evaluation with your parents and discuss strategies on how you can continue to grow during your senior year of high school. You may also choose to share it with your guidance counselors, teachers, and college admissions officers.

We have thoroughly enjoyed working with you in the MOSTEC Program and during the MOSTEC Conference at MIT. We trust that you were both challenged and inspired, and that your memories of the experience will be everlasting. Remember to strive for excellence in whatever you do. Also, remember to stay in touch with our office during and after MOSTEC, and let us know if we can be of any assistance while you plan for college.

Sincerely,

Denise Mytko

Manager of Programs

Du for

Office of Engineering Outreach Programs

Massachusetts Institute of Technology

**Enclosures: MOSTEC Evaluations** 

# MOSTEC 2016 Project Course Performance Assessment

Summer 2016

Student Name: Tobi Ola

**Course: EECS** 

**Instructor Name: Joseph Steinmeyer** 

### **Course Description:**

The Electrical Engineering and Computer Science (EECS) course was an intense four-week online introduction to a series of topics in Electrical Engineering and Computer Science. Students were mailed Raspberry Pi 2-based workstations and used these to carry out a series of electronics hardware and programming lab exercises and homework assignments. Because of the remote nature of the course, all activity, exercises, and work was carried out over the web, making significant use of social media and student-to-student help. The course content was based off of first and second-year MIT EECS coursework. Students investigated topics including algorithm construction, energy, information theory, circuits, big data, state machines, and many others. A major theme of the course was using programming to carry out these investigations, and consequently students got significant experience in applied Python programming. In the last week of the class as well as during the on-campus week, students spent time designing, building, and debugging a final project of their choosing using the Raspberry Pi platform. They ended the course by presenting their final project in front of their peers, MOSTEC staff, and members of the MIT community.

#### **Instructor/TA Assessment**

Feedback on overall performance:

Tobi came into the EECS project course with a bit of background in programming. He built on this experience, making solid progress throughout the homework assignments and labs in the first part of the course. Aside from a stellar intellect, he is an independent worker, but wouldn't hesitate to go and ask for help if he needed it. The questions he asks are intelligent and very high level. He never sought really specific answers, but rather would just ask for guidance and go and fill in the gaps on his own. I was really impressed by this since a lot of high schoolers do the exact opposite: they expect or at least want a detailed step-by-step answer. This might make things easier in the short term, but long term students who do this don't learn as much. Tobi is the complete opposite, and I think this is the key to his success. He wants to learn and wants to put the time into getting where he needs. For a final project, he focused primarily on software and wrote a Python-based tile game that utilized the pygame package. I provided only very limited high-level help when he was working on this project. Just like with the homework and labs, he really wanted to make sure that what he created was coming from his own insight and development, and the result was not only a great final project, but also him really gaining a lot of experience in software design. In my opinion, he's definitely ready to excel in college and I look forward to hearing about the great things he accomplishes in coming years.

# MOSTEC 2016 Project Course Performance Assessment

Summer 2016

Student Name: Tobi Ola

**Course: Science Writing** 

**Instructor Name: Emily Christine Ruppel** 

### **Course Description:**

The Science Writing project is a look at science from the other side. This course looks at science media, written for people who may not have an intense interest in science, who struggle to grasp challenging topics like climate change or particle physics, or who simply love these subjects but are not trained in the sciences. Science is important to everyone, not just to scientists and the scientifically literate. Communicating scientific ideas to the public, however, is a unique and fascinating challenge. The materials in this course are designed to help students become better writers, good communicators of ideas, as well as better critical thinkers. In the process, they apply the knowledge of a writer within the context of science, using the tools of both, writers and scientists simultaneously. Throughout the course, students are evaluated on their ability to apply to their writing what they learn in class. They are also evaluated on their creativity; dexterities in grammar; participation in online class discussions; ability and willingness to engage in intellectually challenging exchanges of ideas with their classmates in a respectful and kind manner; critical thinking skills; team work spirit; diligence; punctuality; initiative and self-direction.

#### **Instructor/TA Assessment**

Feedback on overall performance:

Tobi Ola was one of the most well-organized and present students in this year's MOSTEC class. His assignments were of high quality, reflecting a keen ability to think along interdisciplinary lines and apply complex subject matter to diverse scenarios. His writing is clear and purposeful—Tobi is mindful of his audience and deft with any necessary supporting detail or explanation. I recommend this student highly for work in STEM, especially—his talent and enthusiasm for all areas of science and technology was palpable in class discussions and homework assignments.