Podcast: *ACM Bytecast*
Episode: Jelani Nelson

Welcome to *Hanselminutes*, a podcast in collaboration with *ACM Bytecast*, where researchers, practitioners, and innovators share about their experiences, lessons, and future visions in the field of computing research. In this episode, host Scott Hanselman is joined by Dr. Jelani Nelson, a professor in the Department of EECS at UC Berkeley and a member of the theory group.

To begin, Jelani touches on his own background in coding. A computer theorist and academic in practice, his largest output are his various research papers. With a growing interest in applying his knowledge, he recently became a part time Google employee. The experience has awarded him the opportunity to put his knowledge into practice and collaborate with others in the field. Then, Jelani discusses his Introduction To Algorithms course, in which students learn the techniques and functions of different top programs. The majority of the 700+ students in this class will not go into research, but rather software engineering and other applied fields.

Jelani is one of the four teachers for an algorithmic boot camp for students in Ethiopia to learn coding. Many of the students don't know the first thing about coding when entering the course, but find success in the course and go on to respectable schools suchs as MIT. The students are highly intelligent and chosen as the top 150 students in the entire country of Ethiopia, which is the second most populous country in Africa.

Computer science is a big space, and Jelani believes there is ample room for various approaches and expertise. Scott is interested in analyzing the different ways people approach problems and the algorithms play in coding. Then, Jelani shares the times he feels most accomplished in his work, often being in the pursuit of knowledge. Looking back at his previous publications, Jelani feels especially proud of his thesis in which he helped to determine distinct IP addresses of website visitors.

Finally, Scott and Jelani discuss the IOI, or the International Olympiad in Informatics. Each country's team is composed of 4 high school students. The United States of America Computing Olympiad, or USACO, runs a sequence of contests throughout the year to determine their team members. When analyzing the U.S. participants, Jelani realized that over half of the states didn't have a single camp attendee in the last 10 years. From there, he determined that of the two states with the top participants, students were coming from the same 5 mile radius. There is a clear lack in many opportunities for kids to learn computing outside of the Bay Area. Finally, Jelani and Scott agree that access and awareness of opportunities within the industry is really where it all begins.

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Timestamps:
0:33 - Host Scott Hanselman introduces today's guest Jelani Nelson.
1:07 - The spectrum between software engineering vs. theory.

8:25 - Jelani's approach to teaching undergraduates.
11:30 - Jelani's coding bootcamp, Addis Coder.
15:30 - The importance of algorithms in coding.
19:00 - When does Jelani feel achievement?
21:12 - Jelani discusses his thesis.
26:08 - Discussing the attendance of IOI.

Links:
Connect with Jelani Nelson.
Connect with Scott Hanselman.
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