Tanner Awards for Excellence in Undergraduate Teaching



Montek Singh

Department of Computer Science

Dr. Montek Singh is an exceptional educator whose teaching has transformed undergraduate computer science education at UNC for more than two decades. An Associate Professor in the Department of Computer Science, Dr. Singh is widely admired for his ability to make highly technical and often intimidating material intellectually rigorous, engaging and accessible to students from a wide range of backgrounds. His courses reshape how students see themselves as learners, problem-solvers and emerging computer scientists.

Central to Dr. Singh's teaching philosophy is a focus on conceptual understanding rather than rote memorization. His courses are intentionally designed as learning progressions, with each assignment building toward increasingly complex ideas. A signature example is COMP 541: Digital Logic and Computer Design, in which undergraduates—many with no prior hardware experience—design and build a fully functional computer in a single semester. Students create processors from scratch, implement them on hardware platforms and program them in low-level assembly language, often culminating in creative final projects. Few universities offer experiences of this scope with such consistency and success.

Students consistently describe Dr. Singh's teaching as transformative. One former student reflected that his course was "the single best class I took at UNC," while another shared that it "sparked my interest in research and completely changed my career path." Across courses such as Digital Logic, Computational Photography and the interdisciplinary seminar Lux Libertas, Dr. Singh challenges students to integrate theory, creativity and real-world application. His assessments require students to synthesize concepts and apply them in unfamiliar contexts, ensuring deep and lasting learning. Students report feeling comfortable asking questions, taking intellectual risks and persisting through challenges—an environment Dr. Singh cultivates with intention and care.

Dr. Singh is also known for his extraordinary mentorship and generosity with his time. He regularly supports students beyond class hours, helping them refine projects, build confidence and navigate academic and career decisions. Many former students credit his encouragement with inspiring them to pursue graduate study, research and teaching careers. His influence extends far beyond the classroom, shaping the trajectories of students who go on to contribute to academia, industry and public service.

Through his intellectual rigor, innovative pedagogy, inclusive teaching practices and deeply human approach to mentorship, Dr. Montek Singh exemplifies the very best of undergraduate teaching at UNC. His sustained excellence and transformative impact on students make him richly deserving of the Tanner Award for Excellence in Undergraduate Teaching.