

# Search for the Department Chair of Computer Science and Engineering Tandon School of Engineering

Brooklyn, New York

# THE SEARCH

New York University, a world-class, global research university, seeks a chair and professor for the Department of Computer Science and Engineering (CSE) at the Tandon School of Engineering to join at an exciting moment in Tandon's and CSE's history.

NYU Tandon is renowned for its distinguished, award-winning faculty, top ranking graduate programs, a strong and increasingly diverse student body, and vibrant research endeavors. Tandon has fostered a dynamic and innovative environment that has supported many large scale and forward-thinking initiatives at an exciting time of growth. Along with the Tandon trajectory, the CSE department has undertaken significant new hiring and ambitious initiatives to increase its impact and profile. The next Chair will build upon recent successes and identify and address the next opportunities for thoughtful growth and collaboration across Tandon and the NYU community. The Chair will continue the critical work of the department and build on their reputation of scientific innovation and leadership. They will be an intellectual leader in Computer Science research, contribute to Tandon's wide-ranging and cutting-edge analytical strengths, and champion Tandon's ambitious strategic plan.

Reporting to the Dean, the Chair will be a renowned scholar and experienced administrator. The CSE department has 21 tenured/tenure-track faculty members and 13 contract faculty members, with a desire for growth, and many faculty have joint appointments with other NYU units. The department enrolls ~700 declared undergraduate majors, ~700 on-campus masters students, and ~80 doctoral students. CSE also enrolls a large number of students in their online MS program in cybersecurity. The next Chair will shape the department's future; attract the finest faculty; identify areas for investment; pursue and strengthen cross-disciplinary and interdisciplinary efforts in research and education; champion the work of the department; and oversee the maturation of the department's organizational structure to support the growth in the department. Tandon seeks a Chair who combines outstanding achievements in computer science with effective leadership, collaborative and creative strength, outstanding interpersonal and communication skills, and a passion for the mission of the department, the School, and the University.

NYU has retained the services of Isaacson, Miller—a national executive search firm—to assist in conducting this search. All inquiries and nominations for this position should be directed to Isaacson, Miller as indicated at the end of this document and will be held in strict confidence. Applications should be sent to NYU directly, also as indicated at the end of this document.

## NYU TANDON SCHOOL OF ENGINEERING

<u>NYU Tandon</u> is a leading engineering institution that delivers extraordinary education for students and pioneers research that changes the world. The NYU Tandon School of Engineering is dedicated to furthering technology in service to society and traces its origins back to Brooklyn Polytechnic Institute and Polytechnic University. Their successor institution merged in January 2014 with NYU to add a comprehensive school of research and education in engineering and applied sciences to an already comprehensive and highly regarded research-intensive university. In October of 2015, the school was renamed in honor of an extraordinarily generous \$100 million gift from Chandrika and Ranjan Tandon to support faculty hiring and academic programs.

Today, the Tandon School attracts innovative and passionate learners, evidenced by their U.S. News & World Report ranking that jumped thirteen ranks from #46 to #33 over the last 5 years and 47 spots since its affiliation with NYU began in 2014. Tandon has seen a 77% increase in undergraduate applications and a 97% increase in graduate applications over the same 5 years. As of Spring 2022, Tandon enrolled 2,865 undergraduate students and 4,667 graduate students for a total student body of 7,532. For a comprehensive list of departments within Tandon, please visit the <u>departments webpage</u>.

Rooted in intellectual curiosity, cutting-edge discovery, and academic excellence, Tandon has taken intentional steps toward providing a learning environment that encourages the creation of a healthier, more equitable, and more sustainable environment. There is continued investment in research initiatives, particularly in sustainability, communication/IT, cybersecurity, data science/AI/robotics, emerging media, urban systems, and health, as well as continued curriculum improvement. A new Experiential Learning Center (ELC) was established in the 2021-2022 academic year to encourage immersive, hands-on learning and a new ethical engineering component of the curriculum was implemented across Tandon to ensure that fair and equitable practice is a guiding principle for all students.

In addition to creating and sustaining opportunities for students, Tandon has also invested in faculty growth and development. With increased interest in computer science, the CSE department alone plans to expand their current faculty size from 21 to 30. Finding tenure-track faculty members from backgrounds not traditionally reflected in the STEM space is at the heart of Tandon's recruitment efforts. This work has already been put into motion with a new cohort of up-and-coming educators from underrepresented groups being welcomed to the Tandon campus in the last academic year. Tandon's total research expenditures in the 2021 fiscal year were approximately \$53.9 million.

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The field of Computer Science is intellectually rich, and of broad and growing intellectual, scientific, and societal importance. Within this context, the next Chair will have the opportunity to provide leadership and vision to a growing department that draws upon all the considerable resources in place at the University and its partner organizations.

In recent years, the department has seen steady growth through strategic hires of new faculty, all with the shared goal of utilizing advanced and emerging technologies to create a more connected, secure, and healthy community. Department faculty are leaders in <u>computer science research</u> that spans a broad range of areas. CSE faculty have earned many research grants from national and private funding agencies. CSE has been uniquely recognized as a Center of Excellence in research, education, and cyber operations by the National Security Agency. Rooted in the Tandon mission to find innovative solutions to humanity's most pressing global challenges, the CSE department recognizes the value of working across functional areas for the most dynamic approach to real-world problem solving.

CSE faculty are engaged in collaborative research with the Electrical and Computer Engineering department, the Courant Computer Science department, the Center for Urban Science and Progress, the Center for Data Science, the Grossman School of Medicine, and the Global School of Public Health. CSE faculty and students participate in multiple labs and centers. Two of the centers are prominent contributors to CSE's research portfolio: VIDA, focusing on research related to data and visualization, and CCS, a joint center with Electrical and Computer Engineering focusing on cybersecurity research. The department has seen a growing strength in leading computer science areas such as data science, computer security, and machine learning while also pursuing research projects that are distinctive and unique to CSE, such as those focusing on cybercrime, sports analytics, and online political communication. CSE's research endeavors are at the forefront of the department's commitment to scholarly excellence and innovation.

Beyond research, the CSE department prioritizes reaching learners and scholars at Tandon, NYU, and beyond. CSE's commitment to <u>outreach</u> is evidenced by its number of programs specifically designed to engage different demographics of students. Some of these initiatives include summer programs, competitions, and workshops for highly engaged Tandon students while others include programs for academically strong high school students with an interest in science, technology, engineering, and math. In addition to providing opportunities for current and incoming Tandon students, CSE has also created pathways for students who may not have had the exposure or resources necessary to pursue a higher education in computer science. With that in mind, the department is particularly proud of its Bridge Program, an online program that enables college graduates in non-CS fields to attain the necessary computer science background to begin an MS program in computer science.

## **ROLE OF THE CHAIR**

The next Chair of Computer Science and Engineering will take the helm of a department committed to enhancing its own intellectual depth and global reputation, and its breadth and impact across the University. There is a tremendous opportunity to leverage recent success in departmental hiring and to build on the extraordinary scientific ecosystem that is Tandon. Partnering with distinguished departments, divisions and professional schools across the University; exploring technological possibilities via resource-rich research; and providing top-notch in-person and on-line academic programs will all figure in the work ahead.

The Chair is responsible for strategic planning, operations, finances, academic affairs, and external relations for the Department of Computer Science and Engineering and is a tenured Professor in the department. The Chair leads the faculty, both in recruitment and the oversight of the promotion and tenure process, as well as the requisite support staff and professionals essential to supporting the department's mission.

## **CHALLENGES AND OPPORTUNITIES**

The next Chair will bring a combination of ambitious vision and judgment in devising a strategic plan that aligns with the aspirational goals of the department and the school. The Chair will address the following challenges and identify the following opportunities to position the department for success:

**Craft a strategic vision for the Department of Computer Science and Engineering.** The next Chair will be a strategic leader who shapes a transformative vision for the department. The vision will seamlessly integrate teaching and research efforts, advancing excellence in both, and continue to seek areas of potential growth in academic programs. Considering the increasingly competitive nature of the computer science landscape, it is imperative that the Chair has the ability and confidence to not only build upon current strengths of the department, but also identify opportunities for new ways CSE may impact the field. The Chair must also formulate priorities and execute a targeted plan that leverages the department's resources and talent to actualize the established vision.

**Recruit, retain, and develop talented, entrepreneurial faculty.** The Chair will be charged with leading and supporting the recruitment and development of accomplished educators and renowned scholars. Tandon is committed to supporting a new Chair and investing in their plan to continue hiring in innovative areas. With the aim of increasing the number of tenured/tenure-track faculty, some of whom do and will have joint appointments at Tandon and the University, the Chair must remain nimble as the department grows in dynamic ways. It will be the responsibility of the Chair to ensure the needs of faculty are tended to and that a climate that supports curiosity and growth is nurtured.

**Encourage academic excellence and support growth of academic programs.** The Chair will continue to be responsible to student needs by working with faculty to develop and revise curricula and teaching methods, balancing the applied and practical with the theoretical, while preparing undergraduate students to excel in both graduate programs and a highly competitive workforce and preparing graduate students to excel in research in their chosen career paths. The Chair will look for opportunities to expand existing programs and develop new ones that may add revenue and expand the impact CSE has within Tandon and beyond.

**Establish, promote, and sustain a culture of collaboration within the department and across NYU.** The next Chair will need to promote a culture of interdisciplinary collaboration, including continuing to build connections within Tandon and the Courant Institute. Within the department, the Chair will promote a culture of collaboration that builds on the energy and creativity of individual faculty to catalyze new research and education initiatives. Building upon the successful research work taking place across the department and its eight labs and centers, the Chair will leverage opportunities for collaborations with scientific partners across NYU.

**Build organizational capacity.** While the growth of CSE is evidence of an energetic and vibrant department, it will also present challenges. The Chair must develop administrative structures and processes that are practicable and sufficiently robust for the expansion of the department, bolstering faculty recruitment and mentoring, graduate and undergraduate student teaching, and the pursuit of increasingly productive research. The Chair will also work with the department to nurture an inclusive culture, with a team that will cohere and work together effectively and enthusiastically. This position calls

for an excellent manager who is open in their leadership style and naturally oriented to teamwork and transparency.

#### QUALIFICATIONS AND EXPERIENCE

The NYU Tandon School of Engineering seeks a Department Chair who possesses broad intellectual insights, strategic vision, a collaborative disposition, and the proven leadership and managerial acumen to bring CSE to the forefront of the field. Ideally, the successful candidate will bring many of the following experiences, skills, and qualities:

- An accomplished researcher and scholar with renowned academic stature; an exceptional record of scholarly achievement in Computer Science;
- An earned doctorate in computer science, computer engineering, electrical engineering, or a closely related field;
- A distinguished record in scholarship, teaching, and service consistent with the expectations of the rank of professor and tenure;
- A powerful and visionary advocate for Computer Science; experience in developing and pursuing a strategic vision;
- A creative and inspiring leader, able to think broadly and work collaboratively to identify new strategic intellectual and technical opportunities;
- Demonstrated competence in and dedication to recruitment, retention, and success of faculty, staff, and students;
- Significant and successful management experience including a demonstrated record in building units or activities of comparable scale and complexity;
- Commitment to high quality and innovative research and teaching at the undergraduate and graduate level;
- Understanding of current and emerging issues in computer science, computer engineering, electrical engineering, and education of importance to the state, nation, and world;
- Integrity and the highest standards of ethical behavior.
- While some of the requirements above may appear to be tailored to academics, we encourage applicants who may have spent a significant period or all of their career in industry.

In compliance with NYC's Pay Transparency Act, the annual base salary range for this position is \$225,000 - \$295,000. New York University considers factors such as (but not limited to) scope and responsibilities of the position, candidate's work experience, education/training, key skills, internal peer equity, as well as market and organizational considerations when extending an offer.

## **APPLICATIONS AND NOMINATIONS**

Please submit the following application materials electronically: A cover letter, a current CV, a research statement, a teaching statement, recent teaching evaluations (if available), as well as a statement of your

experience in inclusion, diversity, belonging and equity (IDBE) efforts, and your plans to incorporate them into your teaching, research, mentoring and service. Please also list the names and contact information for four references.

We will review applications beginning on December 1, 2022, and will continue until we fill the position. We encourage you to submit early.

Confidential inquiries and nominations should be directed to:

Karen McPhedran, Managing Associate Alexandra Lolavar, Associate Courtney Cabansag, Associate Briana Hughey, Search Coordinator

## www.imsearch.com/8822

NYU is committed to equity, diversity, and inclusion and is an equal opportunity employer. It encourages inquiries from candidates who will enrich and contribute to the cultural and ethnic diversity of the university. New York University does not discriminate on the basis of age, race, creed, color, religion, marital status, gender identity and/or expression, sexual orientation, veteran status, national origin, or disability status in employment, or in its education programs.