# 2025 NYSCF Summer Internship
# Automation / Software Engineering Track

The New York Stem Cell Foundation (NYSCF) Research Institute is a rapidly growing and highly successful nonprofit whose mission is to accelerate cures through stem cell research. Since our founding in 2005, we have advanced cutting-edge stem cell research in our own laboratory and through support for talented scientists at other institutions.

**NYSCF is seeking applications for talented Automation / Software Engineering Interns to support the development of the NYSCF Global Stem Cell Array®, a robotic system that automates both iPSC derivation and downstream differentiations and assays.**

**Automation / Software Engineering Interns will be responsible for developing the software and tools that form the backbone of our ever-evolving, state-of-the-art research laboratory, and empower our scientists in their research. Software Engineering Interns will use the full stack to develop our custom LIMS web application, while Automation Engineering Interns will develop robotic methods and tools to further optimize the day-to-day operation of the Array®.**

This position will report to the leads of either our Software Engineering or Automation Engineering teams, with additional supervision by other members of these teams. In addition, the role will involve close collaboration with the Array® team, including biologists, project managers, IT specialists, and operations experts.

For more information and application requirements, please visit:
**https://nyscf.org/summer-internship**

**Applications will be reviewed on a rolling basis, starting January 8, until the 2025 cohort is fully selected.**

## PROGRAM DETAILS

The NYSCF Summer Internship Program will run 10 weeks; June 2, 2025 – August 8, 2025, 5 days per week 9:30am – 5:30pm Eastern (excluding holidays). **For Summer 2025, Automation / Software Engineering interns are invited to join us onsite at The NYSCF Research Institute in New York City**. **Opportunities for hybrid internships may be available solely for Software Engineering interns; candidates must be able to commit to onsite work at least 4 days per week, with Thursday as a mandatory onsite day. Automation Engineering internship opportunities are onsite only due to the nature of the projects.**

All interns will participate in a comprehensive curriculum designed to broadly expose interns to all functions of the organization and the field of stem cell research.

Candidates must be able to attend the full program.

**This is a paid position, with the following structure:**

- Undergraduates - $18/hour
- Recent graduates (of an undergraduate program) - $19/hour
- Graduate students - $20/hour

## DIVERSITY, EQUITY, INCLUSION, AND BELONGING

NYSCF is committed to fostering diversity, equity, inclusion, and belonging (DEIB) in STEM. Overcoming the impact of systematic racism, sexism, and other discrimination that has systematically marginalized certain groups from STEM research is critical for a productive, innovative scientific community. NYSCF strongly encourages applications from applicants of all ethnicities, cultures, religions, nationalities, abilities and disabilities, sexes, gender identities, sexual orientations, geographic locations, and socioeconomic statuses.

We invite all applicants to voluntarily self-identify their race and gender. Submission of the information on this form is strictly voluntary and any responses (or non-responses) to this section will not affect the review of your application.

## ELIGIBILITY CRITERIA

To be eligible, candidates must:

- Be currently enrolled as a full-time undergraduate student at an accredited institution, in the field of computer science, engineering, or the basic sciences, with at least two semesters or equivalent experience in computer programming. Recent college graduates and graduate students are also welcome to apply.
- Be a United States Citizen or Permanent Resident Alien at the time of applying or a foreign applicant with appropriate visa documentation, as required by U.S. Immigration, valid for the course of the Internship.
- Be 18 years or older at the time the internship begins (June 2, 2025).
- Demonstrate proficiency with object-oriented programming languages (C#, Java, or C++, Python), web development languages (JavaScript, TypeScript), and front-end libraries (React, Angular).
- Have an interest in stem cell research and have the ability to work and communicate effectively in a fast paced, multi-disciplinary team.
- Have high proficiency in both Mac and PC computer, Microsoft Word, Excel, PowerPoint.

NYSCF prefers candidates also:

- Maintain an undergraduate cumulative minimum Grade Point Average (GPA) of 3.0 on a 4.0 scale for all completed courses as a matriculating student.
- Have Experience with SQL and relational database development.

**Students enrolled in basic sciences are encouraged to apply but must demonstrate a strong proficiency in programming as detailed above.**

## APPLICATION DETAILS

The application components include:

- Contact and other relevant administrative details.
- Complete resume/CV, cover letter, and unofficial transcript.
- Answers to the Automation / Software Engineering track essay questions:
    - How would this position help your larger career goals?
    - Can you provide a technical description of the most rewarding project you've worked on?
    - Which are your three strongest software development skills and which are your three weakest software development skills that you want to improve?
    - If you have experience in hardware, please provide examples of how you have used hardware (Raspberry Pi, 3D Printing etc.) to solve problems or provide examples of how you've used such tools in practical applications.
- Reference details