SITU/

Computational Researcher
Location: Brooklyn, NY (Hybrid)
Type: Full-time, permanent
Pay: Salaried Exempt, $70,000–$95,000

Overview

SITU's Research division is seeking a **Computational Researcher** who is interested in joining an interdisciplinary team engaged in projects that cross design, technology, and human rights. The work, which can broadly be understood as Visual Investigations, involves applied research and innovation in advocacy, legal, and journalistic contexts across a range of issues, from combatting suppression of dissent to rendering visible environmental crime. By joining our team, we offer the opportunity to support creative, world-changing projects.

About you

The candidate will be part of a division that develops and evaluates new technologies for visual investigations. For example, the role may involve developing a computer vision pipeline to query, intake, and analyze satellite imagery to identify built environment structures. It may also involve writing a script to download, catalog, and prepare a large volume of open source videos for other researchers on the team to analyze. Or, it could entail building and packaging a digital platform to visualize evidence in 3D for an international criminal case. Crucially, the candidate should possess an enthusiasm for technological innovation, creative problem-solving, and come with experience in applied interdisciplinary work.

Experience with open source research and event reconstruction is a plus, but not essential.

Primary Relevant Skills
- Experience with data analysis (Python, pandas, numpy, scikit-learn, SQL)
- Experience with command line interface and scripting tools for file manipulation
- Experience with web development (HTML, CSS, Javascript, React, Vue, Svelte, three.js, d3.js, leaflet, mapbox)
- Experience with GIS tools like QGIS, ArcGIS
- Experience with open source content discovery, archiving, and verification
- Strong written and spoken communication skills; ability to document work with attention to detail and incorporate critical feedback
- Demonstrated research skills and experience collaborating on interdisciplinary teams
- Openness to explore, use, and learn new methodologies, frameworks, and tools
- Familiarity with or interest in learning best practices via exposure to sensitive/graphic content
- Familiarity with or interest in learning best practices via design, access, and accessibility

Additional Relevant Skills / Qualifications
- Experience with overseeing a research project from start to finish
- Competency in 3D modeling and rendering software like Blender, Unity, Unreal, Rhino, or Cinema 4D, and an understanding of various rendering techniques and optimizations for large complex geometries
- Competency in the visual design of diagrams, maps, and 3D scenes
- A degree in a design-related field such as Architecture, Urban Planning, Computer Science, or equivalent working experience is recommended but SITU will consider applicants from other fields as well

About us
SITU is composed of three divisions—Studio, Research, and Fabrication—that work collaboratively while providing individual services. SITU Research is a visual investigations practice developing new forms of reporting to cut through digital noise and amplify truth. As a team of architects, computer scientists, and researchers, we take a rigorous and comprehensive approach to synthesizing disparate forms of evidence in order to provide complete accounts of contested events. Whether in the form of interactive digital platforms or 3D site reconstructions, our visual tools allow victims and their advocates to access contextualized and reliable reports of what really happened. These reports serve as an indispensable baseline for advocacy, litigation, journalism, and beyond. Select projects include: Crime Scene: Bucha (2022) with The Associated Press (AP) and PBS Frontline; The Crimes of ISIL against the Yazidi Community in Sinjar (2021) for The United Nations; After the Strike (2021) with AP; The Trap (2020) with Human Rights Watch; Choking Dissent: How Tear Gas is Used to Crush Protestors (2020) with Amnesty International; and a digital platform documenting the destruction of cultural heritage sites in Timbuktu, Mali for the International Criminal Court's Office of the Prosecutor (2016).

SITU is committed to diversity, equity, and inclusion in the workplace and beyond. We believe that having a diverse team (in terms of education, culture, ethnicity, race, class, sex, gender identity and expression, sexual orientation, age, ancestry, languages spoken, religion, mental or physical disability, national origin, citizenship status), is not only the right thing to do, but that it leads to more principled, ethical, and rigorous work. We strongly encourage applications from people who have been historically underrepresented in the fields of human rights, design and architecture.

Benefits
We offer competitive benefits and the opportunity to support creative, thoughtful projects in a studio environment. Benefits include employer health (including two fully funded options), dental, vision, life, and long term disability insurance plans. In addition to 120 hours of PTO, 16 paid holidays, and transportation benefits such as a subsidized CitiBike annual membership, a low-cost parking pass through the Brooklyn Navy Yard, and pre-tax commuter benefits. After a year of employment, you are eligible to contribute to a 401(k) plan through the business, and SITU will match your contributions, dollar for dollar, up to 4% of your annual pay.

Learn more
https://situ.nyc/research/profile

Application instructions
Please send your application materials to work@situ.nyc with the subject line 'Computational Researcher'
Include, as a single (1) PDF attachment:
- a cover letter telling us about yourself, what excites you about the opportunity, and what you can bring to the position
- your resume
- three (3) references
- a portfolio and / or 3 relevant work samples that will enrich our understanding of you and your experience.
- how you heard about the job posting

No phone calls please. Note that this opportunity will close on **September 29, 2023.**