



POSITION OPENING

Position Title: Data Visualization Specialist / Creative Coder

Job Location: Cambridge, MA USA

POSITION DESCRIPTION:

The Senseable City Lab (SCL) at the Massachusetts Institute of Technology (MIT) conducts research involving the use and visualization of real-time data sets generated by urban networks and systems. The digital revolution is layering a vast system of cameras, communication devices, microcontrollers and sensors over our environment, enabling entirely new ways to imagine, monitor, and understand our cities. The value of this system reaches beyond its various components' intended purposes: mobile phone networks reveal social and economic patterns, tracking systems highlight global material flows, and digitally-monitored transportation modes expose human mobility routes.

SCL are seeking exceptional candidates to fill several sponsored research positions involving the graphic visualization of datasets provided by various industries and public entities, including but not limited to telecommunications, healthcare, transportation, and urban or municipal planning. Appropriate candidates may come from a variety of academic backgrounds and experiences.

Responsibilities include working with Senseable City Lab researchers, collaborators and sponsors to:

- Collaborate with data scientists to identify research questions and aggregate data in an actionable way
- Design data visualization tools or platform for a variety of research projects
- Prototype these tools (both the front and back end) through an iterative approach
- Evaluate the usability and the usefulness of these tools with potential users
- Create animations and videos based on data provided from research projects

Minimum requirements: Bachelor's degree and two to three years related work experience. Proficiency in web development (HTML, CSS, Javascript) and/ or programming languages such as Python; familiarity with design software, such as Adobe Creative Suite; some training in graphic or multimedia design; relevant skills for interpreting, analyzing, and pre-processing data; a basic knowledge of GIS or the mapping and use of geographic point and polygon location information.

Preferred qualifications: Master's degree in interaction or computation design, computer and information sciences, media arts and sciences, or equivalent.

A combination of some or all of the following skills is preferred:

- Advanced knowledge of visualizations techniques and user interface design
- Ability to design in the browser
- Proficiency with Javascript frameworks (Meteor, Mean or Derby)
- Proficiency with relational and document-oriented databases (MySQL, MongoDB, postgresQL) and NodeJS
- Proficiency with map-based libraries (Leaflet, Mapbox, CartoDB), D3.js and ThreeJS
- Demonstrated experience with collaborative research methods



We review candidates on a rolling basis and invite interested applicants to submit the following material to <https://podio.com/webforms/20990155/1447915> -

- A motivation letter (usually up to 1 page) stating the applicant's interest in working with SCL and in particular including: research areas and/or projects of particular interest within the given scope, key relevant competencies of the applicant, dates of availability
- CV and portfolio of sample work attached
- An applicant should be ready to provide letters of recommendation or contacts of the academic referees upon request

International scholars are welcome to apply.

Salary will be commensurate with the successful candidates' skills and experience. Additional information about the Senseable City Lab and its projects is available at <http://senseable.mit.edu>.

If you have any questions, please contact senseable-applicants@mit.edu. Please apply for this role through <https://podio.com/webforms/20990155/1447915> .

MIT is an Equal Opportunity / Affirmative Action Employer