

Who are we

[GATE institute "Big Data for Smart Society"](#) is an autonomous research institute, established in 2019 in Sofia, Bulgaria as a joint initiative between Sofia University Bulgaria, Chalmers University of Technology and Chalmers Industrial Technology, Sweden. Its mission is to accelerate the Big Data and Artificial Intelligence research, innovation and education in collaboration with government, industry and society as a whole.

We are working on innovative solutions, which develop research excellence in three technology areas – Data Insight, Data Analytics and Data Management – and on a cross cutting area – Engineering and development. Moreover, we are working on advanced analytics solutions in four application domains – Future Cities, Intelligent Government, Smart Industry and Digital Health, which are now in the front line for creating actionable value for society, bringing human centricity and better decision-making to the stakeholders.

We offer diverse opportunities for career growth, foster research freedom and provide maximum support for personal initiative.

With respect to its planned intensive development in 2021, we are looking for young talents to join our internship programme.

What we offer

- 3-6 months internship
- Attractive stipends
- Hands-on experience of thriving research
- Work in bright, friendly and energetic international teams
- Live projects, extensive coaching and career counseling
- Development of professional skills and competences in Big Data and Artificial Intelligence
- Opportunity to join GATE team as a junior researcher

Who we are looking for

- A Bachelor (III – IV year) or a Master-degree student in ICT
- Interest in the fields of Machine learning and Computer vision, previous experience is an advantage but is not mandatory
- Strong motivation to carry out research and produce results under supervision
- Love for insights and aptitude of critical analysis, evaluation and synthesis of new and complex ideas
- Understanding of Big Data and Artificial Intelligence, data management, analytics and visualization
- Experience with programming (e.g., Python, Java, C++, or other)
- Excellent English

If you have projects, you are proud of, please do share them with us!



Expectations and tasks

As an intern in our team, you will be involved in our City Digital Twin project:

- Exploration of alternatives for spatial data storage and integration, including relational geo-database paradigm (i.e., PostgreSQL and PostGIS), graph databases (i.e., Neo4j) and serialization formats for linked data such as NGSI-LD
- Development and visualization of semantic 3D data models in JSON or GML formats (e.g., CityJSON or CityGML)
- Exploration and development of Machine Learning/Artificial Intelligence models and methods for decision support of urban processes
- Exploration and development of Machine Learning/Artificial Intelligence models and methods for object detection and features extraction from geo-spatial data, such as satellite imagery and point clouds

For more information about the tasks and joining Future Cities team, please contact dessislava.petrova@gate-ai.eu.

How to apply

If you feel like you would fit in with our team, please fill the [registration form](#) of GATE internship programme and share your CV and motivation letter until **25.06.2021**.

Your internship is expected to start after **5 July 2021**.

Only selected for interview candidates will be contacted.

Joining the GATE internship programme, you will open the most exciting chapter of your career!

