



## Development of a Graph Library: specialized for company shareholder structures, built with ThreeJs

### About Sosias Data

We are a Data-Mining startup founded by three students from TUM. We mine publicly available data of companies and sell it aggregated to our customers through our Web-App.

### About the project

We are mining daily gigabytes of data that need to be delivered to our customers in a visually appealing and user friendly way. An important part for our customers is the display of company shareholder structures, which are displayed in a graph.

Currently we use a publicly available NPM package (vis-network) which does the job, but has much room for improvement. This is where you come into play - Your task is to support the development of a powerful Graph Library, which is capable of displaying different types of graph-data-structures (e.g. node-edge-lists, adjacency matrix) as a planar graph and render the whole thing into an HTML-Canvas.

Features such as dragging around nodes and edges, live editing of the data-structure, as well as to download the content as a pdf/png/jpg are a nice add-on.

### Scope of the project

1. Familiarize yourself with the used Technologies: Typescript, ThreeJs, WebGL, NPM
2. Develop, together with us, a working prototype of the library (bitbucket repo)
3. Create a private NPM package based on the repo to complete the project

### What you can expect from us

You will be assigned to one of our team members who will take care of you during the semester via regular 1 on 1 meetings (online or offline) and support you in the project. We are very flexible in terms of working time, so you decide when and where you will work on the project.

### What we expect from you

If you can work independently and want to do something hands-on, then we are your partner! Besides the regular meetings you will have complete freedom in terms of time management. If you think something is missing in our techstack or some other technology would be a better fit – we will try it. It's our project!

### Interested? Write us!

Send us a short email describing why you want to work on this project particularly and what your knowledge in the field of Computer Graphics and Frontend Development is (lectures, internships, etc..). CV and grades are optional – we value your motivation and drive most!

I am happy to hear from you, [m.borisov@sosias-data.de](mailto:m.borisov@sosias-data.de).