



Catch fraudsters using their geolocations

Introduction to the SEON Challenge

How can you get the most out of the geo-data of a user?

Our company is fighting online financial fraud and our customers tend to provide addresses of their users (shipping, billing, residency) which we complete with IP location and other location-related data (e.g. country of phone).

Potential ideas can be:

- catching impossible travels (detecting track information from user location and determining whether a behavior was physically possible; it can catch account takeovers)
- finding unknown data centers or VPN servers
- using network science with graph database
- identifying country- or region-specific patterns from the data
- completing partial data with geolocation
- a really insightful visualization
- a mixture of these
- or any other idea which can be useful for the great cause of fraud prevention and/or impresses us. Surprise us!

So now it's your turn: how can you get the most out of the geo-data of a user?

Who we are

SEON is the go-to fraud prevention solution for ambitious FinTech leaders, like Revolut, NuBank, Afterpay, Patreon, Sorare, and Mollie. By offering rapid integration and pay-as-you-go flexibility, SEON is able to offer a simplified, modern way to fight fraud. The company's industry-leading solution uses AI and fully explainable machine learning to adapt across sectors.

Since its formation, SEON has served over 5,000 merchants and reviewed over 1 billion transactions. In turn, this has helped the company to save its customers more than €50 million in potentially fraudulent transactions. The globally focused business operates offices in Austin (TX), Budapest, London, Jakarta, and Singapore.

With specialties in the neo banking, crypto, eCommerce, Buy Now Pay Later (BNPL), and Web 3.0 sectors, SEON is well-equipped to deal with the demands of modern online fraud prevention and has recently launched an AI-based fraud detection and one-click prevention app on Shopify.

What we will provide

Free trial of our system:

We have a free trial of our service, but we created a different, extended plan just for you. So, you can have access to an otherwise paid service of ours.

Conditions:

- Please create an email address with the following pattern junctionx_{lowercase_team_name}@gmail.com (e.g. Best Team -> junctionx_best_team@gmail.com) and register on our website for your free plan and start sending requests to our API.
(Tips and tricks: 1. Forking our Postman collection can shorten dev time and 2. necessary Licence key can be found in the Admin site after the registration under the My Account page.)
- Useful fields can be user-provided location fields (user- shipping- or billing-address) or SEON-provided fields (IP-location (country, lat-long, ISP) (can be handled differently if an IP is from VPN/proxy/datacenter/mobile internet), phone location (original carrier, roaming carrier), timezone, etc.

This trial account has limitations: it allows a maximum of 2 queries per second and an overall maximum of 40k API calls, but all social media checks will be turned off.

Our mentor team can help you validate your idea.

Other useful resources:

- Online Fraud Prevention (for dummies)
- Fraud dictionary
- SEON knowledge base

You can use geocoding services (e.g. OSM or Google Maps API) or any publicly available dataset (e.g. <https://www.kaggle.com/datasets?search=fraud>), but all used sources shall be referred to in the submission.

Implementation and technology

There isn't any "technical" restriction, you can choose whatever tool you are comfortable using, although please consider feasibility! We want to see a working prototype (PoC, not a perfect) solution. You can use our API to build the solution, but you don't have to.

Judging criteria

The evaluation will be done according to five aspects.

- Creativity / innovativeness
- Impact / validation / relevance
- Feasibility
- Prototype
- Presentation

We also take into account the team composition and the skills of the team members, so please introduce the team at the beginning of the presentation.

Prizes

1st team - 1500 EUR