Maksim Tropnikov

Frontend Developer

About me

- I'm a frontend developer with scientific background (switched careers from Physics). My job as a researcher involved programming in C++, MatLab and LabVIEW, and developing several tools for using in the lab.
- Currently deepen my knowledge in React ecosystem, Express.js and MERN stack. You can view my code samples, study projects and test assignments on my github.
- Have experience of public speaking at international conferences. Fond of photography, love dogs.

Skills

- o HTML, CSS, SASS/SCSS, LESS
- o JavaScript, React, Redux, Redux Toolkit, TypeScript
- o Node.js, Express, MongoDB, Webpack, Gulp, Docker
- o Git, GitHub Flow, Agile

Experience

Mar 2022 - Frontend Developer, Fins.money, remote

Present Working at fintech company Fins.money (part of BCS) – an investment and trading platform for individuals. Development of new features of SPA based on React and Redux, clearing out technical debt, reducing backlog.

Stack: HTML, CSS (LESS), JavaScript, React, Redux (dva), Ant Design, Agile.

Dec 2021 - Junior Frontend Developer, R-Style Softlab, remote

Mar 2022 Development of hybrid mobile applications using Ionic and Apache Cordova frameworks. Migrating old codebase from AngularJS to Stencil, creating design components with Storybook.

Stack: TypeScript, Angular, Ionic, Cordova, GitHub Flow, Stencil, Storybook, Jest.

Mar 2021 - Frontend Developer (apprenticeship), Yandex. Practicum, online

Present Learning frontend development with MERN **stack**: HTML, CSS, JavaScript, Git, React, React Router, Node.js (Express), MongoDB, BEM, OOP, Webpack.

During my study at Yandex.Practicum on Web Developer course I implemented several projects:

- **Mesto.** Project in vanilla JS implemented first with functional programming, then refactored in the OOP paradigm. Functionality: adaptive layout, downloading cards from the REST API, addition/deletion of cards, profile editing and cards liking; OOP when creating a card, adding them to markup, validating forms and opening the popups.
- Mesto React with authorization and registration. Mesto project ported on React with main content shown only after authorization (hidden with Protected Route), written in functional components with hooks. CRA and React Context are used. Authorization and registration utilizes JWT saved in local storage.
- Mesto Backend. Backend for Mesto project written with Express.js. Authorization with JWT, loggers, CORS, error classes and validation with celebrate and Joi are used. MongoDB is used as a database. Deployed to cloud with nginx as a reverse proxy server.

All projects were code reviewed.

- 2013 2021 **Junior Researcher at Quantum sensors lab.**, *Institute of Laser Physics SB RAS (ILP SB RAS)*Theoretical and experimental research in the fields of quantum optics and atomic standards, more precisely on the development of an optical frequency standard based on Mg atoms.
 - I developed a thermostabilization system based on LabVIEW and using ADC-DAC and theoretically modeled laser fields interacting with cooled atoms in MatLab.
 - Gave talks at international conferences. Assisted in writing articles for scientific journals.

Education

2015 – 2019 **Graduate work at the PhD level in Physics, specialty: Optics**, *ILP SB RAS*, Novosibirsk, Russia, Laser cooling and spectroscopy of cold magnesium atoms localised in a magneto-optical trap for an optical frequency standard.

2013 – 2015 MSc in Physics, Novosibirsk State University, Department of Quantum Optics, Novosibirsk, Russia

2009 – 2013 **BSc in Physics**, *Novosibirsk State University, Department of Quantum Optics*, Novosibirsk, Russia Other

Oct 2017 **Predoctoral school Cold atoms and quantum transport**, Les Houches Physics school (Ecole de Physique des Houches), Les Houches, France, October 2–13, 2017

Courses and certificates

Web Developer Course, *Yandex.Practicum*, 2021-2022 (ongoing), HTML, CSS, BEM, JavaScript, OOP, React, React Router, Webpack, Node.js, Express, MongoDB

Interfaces Development: Layout and JavaScript Specialization, *Coursera*, MIPT, Yandex and E-Learning Development Fund, 2021, course 1 of 5. Certificate

Languages

Russian Native

English C1

French A2

Extra info

Interests Digital and analog photography, piano, sport: cycling, running and swimming.

Winner at the 55th International Scientific Student Conference «MNSK 2017» in *Photonics and quantum optical technologies* section. Winner (2018) and third winner (2019) of the ILP SB RAS young students conference contest.

Published several papers with co-authors during my scientific career – on Physics, for now.