# Michał Osadnik

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### 1 Education

## 1.1 2020 – present. Aalto University, Helsinki, Finland

Master's program in Computer, Communication and Information Sciences. Computer Science School of Science, School of Electrical Engineering Aalto Venture Program Startup Minor

## 1.2 2016 – 2020. AGH University of Science and Technology, Kraków, Poland

Bachelor of Engineering Computer Science.

Thesis: "Application for tracking and simplifying debts among members of a social network" Faculty of Computer Science, Electronics and Telecommunications

### 2 Projects

### 2.1 2019 – present. Rainbow Wallet

- The idea for this mobile wallet comes from the research that has proven a need for a solution for managing Ethereum assets and cryptocurrencies that is simple and accessible for beginners. We help not only to store them but provide interactions with the number of services for sending, swapping, and investing.
- The Rainbow is used by thousands of users.
- We used React Native (with Swift and Java). Because of the transparency, we made it fully open-source.
- My responsibility includes writing new functionalities related mostly to UX and low-level optimizations.

#### 2.2 2019 – present. React Navigation

- React Navigation is born from the React Native community's need for an extensible yet easy-to-use navigation solution written entirely in JavaScript on top of powerful native components.
- I was responsible for rewriting the whole core of the library from scratch into the very new version (5.0) that manages to overcome existing limitations.
- React Navigation is currently used by hundreds of thousands of projects.
- I gave a number of conference talks about this project.

## 2.3 2019 - 2020. Spendshare

- Part of my bachelor thesis.
- Exploring Linear Programming (with deep theoretical research on NP-complex problems reductions) to extend the possibilities of simplifying the debts algorithm.
- My duties involved back-end and microservices' development.

#### 2.4 2018 – 2020. React Native Gesture Handler

- I co-created and was managing a library providing gesture management APIs for building touch-based experiences in React Native. It makes touch interactions and gestures dependable and deterministic.
- React Native Gesture Handler is the primary solution for gestures' recognition in React Native used by hundreds of thousands of projects.

These and other projects are available found on my GitHub.

## 3 Work experience

## 3.1 02.2019 - present. Rainbow Studio. Software Engineer, Partner. New York, USA, and remote.

- Developing an Ethereum-based crypto wallet for managing assets (described in 2.1).
- Managing open-source supportive libraries (e.g. React Native Animated Charts).
- Contributing to external open-source projects.
- Coparticipating in essential product decisions.

### 3.2 09.2019 – 03.2020. Software Mansion. Software Engineer, Open Source Manager. Kraków, Poland.

- Involvement in many popular Open Source projects related mostly to React Native.
- Managing Open Source strategy for the whole company in development and marketing objectives.
- Working for clients' projects.

## 3.3 06.2019 – 09.2019. Facebook, React Native core. Front End Engineer Intern. London, UK.

- Focusing deeply on generating low-level (C++, Objective-C++) code from JavaScript static analysis.
- Improving new React Native architecture to allow type-safety in critical parts of the framework.
- Migration of the Marketplace used by billions of users into the code generation system authored by myself.

## 3.4 02.2018 – 06.2019, Software Mansion. Engineer. Kraków, Poland.

- Development of several web and mobile applications for our clients
- Contribution to significant open-source projects related to React Native.
- Involvement in front-end and mobile development, sometimes exploration of the back-end side.

## 3.5 06.2017 – 01.2018. Printbox. Junior Mobile Developer. Kraków, Poland.

• Development of a mobile application for our clients.

#### 4 Skills

Technologies. Advanced: JavaScript, React, React Native, Java, Objective-C, Swift.

Medium-level: Swift, Python, C++, C, Objective-C++.

**Fields.** Mobile and front-end development, UX and UI, Theoretical Computer Science, Computation theory, Cryptocurrencies and cryptography.

#### 5 Conference Presentations and Extracurricular Activities

#### 5.1 Academic activities

September 2020 – present, Aalto Computer Science guild member.

September 2016 – 2019, BIT Scientific Society.

2017 – 2018, Idea Factory Section President. 2016 – 2018, Algo Section Teacher.

2019, 2018, 2017, 2016, Rector's Scholarship for outstanding academic performance.

2016, Laureate of AGH Olympiad in Physics, Laureate of AGH Olympiad in Math.

#### 5.2 Conference talks

- 6 December 2019, React Day Berlin, Lecture: "Navigation in React Native", .
- 11 September 2019, React Edinburg, Lecture: "Component-first Navigation API".
- 5 September 2019, React Native Europe, Lecture: "Component-first Navigation API".
- 5 April 2019, App.js, Krakow; Workshop: "Native animations and gestures".
- 4 December 2018, Student ITAD Festival, Krakow; Lecture: "Building applications with Expo".
- 20 October 2018, Mobilization, Łódz; Lecture: "Declarative gestures and animations in React Native".
- 7 April 2018, SFI IT Festival, Kraków; Workshop: "Building applications with React Native and Firebase".