# Alberto Schiabel

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Alberto Schiabel (@jkomyno) is a Software Engineer living in **Milan (Italy)** who sold his first software 7 years ago. He has worked in several product and consulting software companies, but he was also a freelancer and startup co-founder He enjoys mentoring colleagues and learning something new every day. From time to time, he writes blog posts or answers questions on StackOverflow. He's been selected as the first draft editor of the upcoming book "Real World Next.js", authored by Michele Riva, a Google Developer Expert.

## EDUCATION

### University of Padova
Master's Degree in Computer Science, major in Software and Artificial Intelligence

Oct 2019 – Dec 2021
Grade: 110/110 with Honors

### Czech Technical University in Prague
Graduate Research in Discrete Submodular Optimization with Prof. J. Mareček and V. Kungurtsev, Ph.D.
- Constructed and evaluated a novel family of multi-set maximization algorithms with approximation guarantees as a M.Sc. Thesis
- Thesis was evaluated as "significantly above the usual standard" by Prof. Jan Vondrák (Stanford University, CA, USA)

Mar 2021 – Jan 2022

### University of Padova
Bachelor's Degree in Computer Science

Sep 2016 – Sep 2019
Grade: 105/110

## SELECTED WORK EXPERIENCE

### Vivaldi United Group (main client)
**Software Engineer & Project Manager**, External Consultant
- Cut logistics costs by implementing a web app in Node.js and C++ that proposes optimal paths to pick items from a warehouse
- Streamed and processed CSV files of 100+ MB between the browser and the backend services using Node.js, REST and gRPC
- Created two controller apps in Qt/C++ and Haskell to streamline configuration of proprietary hardware equipment

May 2018 - Present
Remote

### Pagination
**Software Engineer**, Intern
- Designed and implemented a distributed serverless architecture on AWS using Go, Protobuf, and Redis Cluster
- Automated builds, code generation, tests, deployment using Docker, Jenkins, Terraform

Jun 2019 – Aug 2019
Padova, Italy / Remote

### Workteam
**Software Developer**
- Contributed to several company RESTful products and internal auditing tools, both as a solo and in a team
- Mentored new members of the team, performed code reviews about TypeScript, Node.js, Postgres code

Jul 2016 – May 2019
Venice Area, Italy

### Skydreamer
**Mobile Software Developer**, Startup Partner
- Developed 70% of the product mobile app with React Native and Firebase, and mentored new International colleagues

Feb 2017 – Aug 2017
Remote

## SELECTED PROFESSIONAL SKILLS

- **Proficient in**: TypeScript, Python 3, Go, C++17
- **Familiar with**: Haskell, Rust, Scala
- **Frameworks/Tools**: Node.js, React.js, Apache Kafka, Akka
- **Databases**: Postgres, Redis, SQL Server
- **Ops/Cloud**: Docker, AWS Lambda, AWS API Gateway
- **Programming Paradigms**: Functional, Object Oriented

## OPEN SOURCE PROJECTS

**React Native User Inactivity** – React Native, React.js Hooks, TypeScript — Sep 2017 - Present
- Wrote a library that exposes a hook to allow developers to run custom logic upon inactivity on mobile; 140+ stars on Github

**Budgeted Maximum Cover** – Scala, Rust, Python 3, Akka Typed — Oct 2021 - Nov 2021
- Implemented a concurrent optimization problem using the actor model and parallel iterators, comparing Rust to Scala

**Metaheuristic TSP Solver** – C++17, Python 3 — Dec 2020 - Mar 2021
- Implemented a configurable metaheuristic TSP solver engine in C++17 with hyperparameter tuning support

**While+ Programming Language Interpreter** – Haskell, Monad Transformers, Semantics — Oct 2020 - Dec 2020
- Developed a parser and a monadic interpreter with a REPL for an imperative programming language

**Butterfly** – Apache Kafka, Node.js, TypeScript, Java 11, Postgres, Docker — Nov 2018 - May 2019
- Analysed, designed, developed and documented a Kafka-based notification hub microservice platform for Imola Informatica
- Led a team of 7 people, proposed architecture solution, guaranteed compliance with the project delivery deadlines

**Palitra** – Go, Travis CI — Nov 2017 - Oct 2018
- Built a CLI tool that concurrently finds the $n$ most frequent colors in a picture using message-passing via goroutines and channels

## AWARDS

### Winner of Public Tender
Developed Android quiz app based on a Node.js + MongoDB backend to teach kids about road safety issues and rules

2015 - Jun 2016
Italian State