

Daniel-Cosmin Incicău

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Education

- **M.Sc. in Computational Biology and Bioinformatics, ETH Zürich** *September 2021 – present*
- **B.Eng. in Computer Engineering, Polytechnic University of Timișoara** *September 2016 – June 2020*

Work Experience

- **BusyMachines – Software Engineer** *July 2018 – present*
 - Building high-performance, distributed systems the pure functional way, using Scala and proper functional libraries.
 - Involved in multiple projects from a couple of industries: healthcare, transport logistics.
 - Responsible for all steps of the Agile software development cycle: from refining the product requirements, to actual implementation, testing, and release of features.
 - Provided mentorship for junior colleagues
 - Part-time scrum master of the team
 - Languages and technologies used in my day-to-day work: Scala, Akka, Kafka, Docker, AWS and other Typelevel libraries like Cats, Cats-Effects, Http4s, Doobie, Fs2.
- **Computer Voice Systems – Software Developer** *July 2017 – June 2018*
 - Working on a back-office solution for a brokerage firm involved in commodities trading.
 - Responsible for automating the continuous integration process for multiple projects.
 - Languages and technologies used in my day-to-day work: Java, Google Web Toolkit, JUnit.

Technical Skills

- **Programming Languages:** Scala, Java, Python, Kotlin, C, Go
- **Frameworks and Libraries:** Akka, Typelevel.scala
- **Technologies:** Kafka, AWS, Docker, SQL Databases, MongoDB

Achievements

- **Unihack** (<https://2019.unihack.eu/projects>) *2019*
Finalist team at an international student hackathon held in Timișoara.
“Karen the Drone”, consists of a web-based platform to survey and investigate interest points around an area using drones and image classification algorithms.
- **iTEC** *2017*
Special prize for the most creative idea of a mobile application developed for Android in a hackathon that took place in Timișoara.
- Participant in the **National Biology Olympiad.** *2013, 2014*

Projects

- **Karen the Drone**
 - Web-based platform to survey and investigate points of interest using drones.
 - We developed a web platform in Java and Python, which was used to control a programmable DJI Tello drone. The live feed from the drone was sent back to the platform, where we applied some image processing and classification algorithms to find points of interest.
- **Ticket management system**
 - <https://github.com/DanInci/ticket-checker-backend>
<https://github.com/DanInci/ticket-checker-android-app>
 - An end-to-end solution, suitable for managing events that allow admission based on pre-sold tickets.
 - On the client-side, there is an Android mobile app written in Kotlin, which can scan different barcode formats, validating tickets and showing real-time statistics about the event attendance.
 - The server consists of a restful API built for high-performance in Scala, which uses a SQL database for storage.
- **Projector Controller**
 - <https://github.com/DanInci/raspi-projector-backend>
 - A server application built in Go that wraps the Impress Remote Protocol and acts as a middle layer between a PowerPoint presentation and several clients who want to control it. The server and a client web application are hosted locally on a Raspberry PI.
 - Using a setup where the Raspberry PI is configured as a Wi-Fi access point with a capture portal, and where it has a connection to a projector or a screen, you will have a working remote presentation controller without installing any applications on your phone.