



## Mikolaj Semeniuk

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## Skills

- Very good knowledge of **Java** version **8** and its data structures, including **Optional**, **Streams** and **Regex** expressions
- Very good knowledge of **Spring Framework** and **Spring Security**
- Very good command of **C#** version **5.0** and its data structures, inter alia, structures **IEnumerable**, **ICollection**, **OneOf**, **LINQ**, **await/async**, **Regex** and **Reflection**
- Very good command of **.NET** framework and **Entity Framework**, **Migrations**, **Identity Server 4** and **MassTransit**
- Very good knowledge of **Python** version **3.7**, especially in data analysis and building models to perform predictions, classification, learning about data structure, data tagging, generating synthetic data using **Sklearn**, **Pytorch**, **Tensorflow** and **Keras**
- Very good knowledge of **Docker** and **Kubernetes**
- Very good knowledge of **Linux** and **Bash** (I use Linux every day)
- Very good knowledge of **Windows Forms**
- Very good knowledge of **VueJS** and **AngularJS** frameworks, frontend application **state management**, dynamic data sending, displaying **API requests**
- Very good knowledge of languages such as **NodeJS**, **GoLang** and **ExpressJS** and **Go-GIN**frameworks
- Very good knowledge of the practices of writing **Clean Code** **Uncle Bob's**, **SOLID** principles, **DDD**, **TDD** and knowledge of design patterns such as **CQRS**, **CQS**, **MVC**, **Fabric**
- Very good knowledge of relational databases such as: **SQL Server**, **MySQL**, **PostgreSQL**
- Very good knowledge of non-relational databases such as: **MongoDB**, **Redis**, poor **Apache Cassandra**
- Ability to write unit tests and tests using the **Selenium** framework
- Very good command of the **English language**
- Very good knowledge of of environments such as: **Visual Studio**, **IntelliJ**, **Visual Studio Code**, **Google Colab**, **Jupyter notebook** oraz **Conda**

I am currently an extramural 3rd year student in **Data Science**. I have almost **three years of experience** in developing web applications mainly in languages such as **Java** and **C #** and data analysis using **Python**.

In my spare time I read books about data analysis, especially about unsupervised learning, and I learn new languages and upload projects to **GitHub**, **Google Colab**, I also participate in **StackOverflow**

## Experience

### Ernst & Young

I was employed as a junior analyst, but the scope of my duties varied depending on the projects to which I was assigned. Below are the projects and responsibilities.

- 2021.09–2021.01

Implementation of new functionalities and modernization of the internal portal of the British insurer. I was responsible for:

  - Adding new functionalities contained on the portal: **Jira** and **Confluence** in accordance with the **Scrum** methodology
  - Communicating with **Business Analysts** and **Scrum Master** from Great Britain in English
  - Implementation of **API** endpoints using **Spring Web** compatible with the **Controller, Service, Repository** pattern
  - Implementing user rights and roles and generating authentication tokens using **OAuth2** and **Spring Security**
  - Configuration of communication between **micro services** using **RabbitMQ**
  - Implementation of writes and reads to the **SQL Server** relational database
  - Sending and receiving **SOAP** and **REST** requests
  - Upload files using requests
  - Creating new branches, resolving merge conflicts and adding changes to the repository via **Git** version control versions, and **Azure Dev Ops**
  - Writing unit tests
  - Testing **API** with **Postman**, **Insomni** and **Swagger**
  - Writing and reading technical documentation

- 2020.12–2020.11

Analiza danych dla wewnętrznego narzędzia **IPD** firmy **EY** do rozpoznawania procesów biznesowych. Do moich obowiązków należało:

  - Czyszczenie i przygotowanie zebranych danych
  - Analiza danych przy użyciu **pythona 3.7**, **sklearn**, **pandas**, **numpy**, **matplotlib** oraz **seaborn**
  - Wykrywanie cech za pomocą algorytmów z pakietu **sklearn** takich jak **PCA**, **K-means** oraz **K Nearest Neighbors**
  - Budowanie modeli uczenia się struktury danych przy użyciu **pytorch** i **tensorflow** takich jak **Autoenkodery**

- 2020.11–2020.05

Data analysis for **EY** internal **EY** business process recognition tool. I was responsible for:

  - Cleaning and preparation of collected data
  - Data analysis using **python 3.7**, **sklearn**, **pandas**, **numpy**, **matplotlib** and **seaborn**
  - Feature detection with **sklearn** algorithms such as **PCA**, **K-means** and **K Nearest Neighbors**
  - Building data structure learning models using **Pytorch** and **tensorflow** such as **Autoencoders**

- 2020.05–2020.02

Implementation of an internal invoice settlement portal for a company from Poznań using the NodeJS language and the Express.js framework. I was responsible for:

  - Adding new functionalities in accordance with the **Scrum** methodology
  - Communicating with **client** and **Scrum Master**
  - File validation in terms of business logic
  - Coding, reading and saving a large number of files (mainly excel files) on the server
  - Sending emails to customers who are in arrears with payment of their debts
  - Testing **API** with **Postman**, **Insomni** and **Swagger**
  - Writes and reads to the **PostgreSQL** relational database
  - Creating new branches, resolving merge conflicts and adding changes to the repository via **Git** version control versions, and **GitLab**

### LastLevel

I worked as a full-stack developer using technologies such as PHP with Laravel framework and JavaScript with frameworks, AngularJS and VueJS

- 2019.11–2019.02

Implementation of new functionalities on the front and backend side in online stores and blogs as well as data analysis for these portals. I was responsible for:

  - Maintaining application state with **Vue Store** and **Angular NGRX**
  - Sending **REST** requests using **Vue Axios** and **Angular HttpClient** to the backend
  - Generating mobile and desktop applications from JavaScript code using **Electron** and **Apache Cordova**
  - Dynamic display of backend data
  - Implementation of new artwork using **VueJS** and **AngularJS**, and **bootstrap**, **material**, **tailwind css frameworks** and **SCSS**
  - Implementation of **API** endpoints using the **Laravel** framework compatible with the **MVC** pattern
  - Implementing user rights and roles and generating authentication tokens using **Laravel Passport**
  - Implementation of writes and reads to the **MySQL** referential database
  - Sending emails to users
  - Testing **API** with **Postman**, **Insomni** and **Swagger**
  - Creating new branches, resolving merge conflicts and adding changes to the repository via **Git** version control versions, and **GitLab**, and **RedMine**
  - Data analysis using the **Python** language and algorithms: **PCA**, **Logistic Regression**, **Random Forests**, **K- Means**, **K Nearest Neighbors** from **Sklearn**

## Education

### Warsaw School of Computer Science

- Present–2019.10

In 2019, I started my studies at the Warsaw School of Computer Science in extramural mode, specializing in **Data Science**. I am currently in my third year and I am starting an engineering thesis about generating synthetic data by the Deep Belief Network model (**Deep Belief Network**)