



# 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 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: <ul style="list-style-type: none"><li>• Adding new functionalities contained on the portal: <b>Jira</b> and <b>Confluence</b> in accordance with the <b>Scrum</b> methodology</li><li>• Communicating with <b>Business Analysts</b> and <b>Scrum Master</b> from Great Britain in English</li><li>• Implementation of <b>API</b> endpoints using <b>Spring Web</b> compatible with the <b>Controller, Service, Repository</b> pattern</li><li>• Implementing user rights and roles and generating authentication tokens using <b>OAuth2</b> and <b>Spring Security</b></li><li>• Configuration of communication between <b>micro services</b> using <b>RabbitMQ</b></li><li>• Implementation of writes and reads to the <b>SQL Server</b> relational database</li><li>• Sending and receiving <b>SOAP</b> and <b>REST</b> requests</li><li>• Upload files using requests</li><li>• Creating new branches, resolving merge conflicts and adding changes to the repository via <b>Git</b> version control versions, and <b>Azure Dev Ops</b></li><li>• Writing unit tests</li><li>• Testing <b>API</b> with <b>Postman</b>, <b>Insomnii</b> and <b>Swagger</b></li><li>• Writing and reading technical documentation</li></ul>
2020.12-2020.11	Data analysis for <b>EY</b> internal <b>EY</b> business process recognition tool. I was responsible for: <ul style="list-style-type: none"><li>• Cleaning and preparation of collected data</li><li>• Data analysis using <b>python 3.7</b>, <b>sklearn</b>, <b>pandas</b>, <b>numpy</b>, <b>matplotlib</b> and <b>seaborn</b></li><li>• Feature detection with <b>sklearn</b> algorithms such as <b>PCA</b>, <b>K-means</b> and <b>K Nearest Neighbors</b></li><li>• Building data structure learning models using <b>Pytorch</b> and <b>tensorflow</b> such as <b>Autoencoders</b></li></ul>
2020.11-2020.05	Implementation of new functionalities and modernization of the internal portal of the company from the United States dealing with the production of prostheses. I was responsible for: <ul style="list-style-type: none"><li>• Adding new functionalities contained on the portal: <b>Jira</b> and <b>Confluence</b> in accordance with the <b>Scrum</b> methodology</li><li>• Communicating with <b>Business Analysts</b> and <b>Scrum Master</b> from the United States in English</li><li>• Implementation of <b>API</b> endpoints using <b>Asp Net Core Mvc</b> compatible with the <b>Controller, Service, IService</b> pattern</li><li>• Implementing user rights and roles and generating authentication tokens using <b>OAuth2</b> and <b>Asp Net Identity</b> and <b>Identity Server 4</b></li><li>• Communication configuration between <b>microservices</b> using <b>RabbitMQ</b> and <b>MassTransit</b></li><li>• Implementation of writes and reads to the <b>SQL Server</b> relational database and <b>Redis</b> NoSQL database</li><li>• Sending and receiving <b>GraphQL</b> requests using the <b>Hot Chocolate</b> framework and <b>REST</b> requests</li><li>• Upload files using requests</li><li>• Creating new branches, resolving merge conflicts and adding changes to the repository via <b>Git</b> version control versions, and <b>Azure Dev Ops</b></li><li>• Writing unit tests with <b>xUnit</b> and <b>Moq</b></li><li>• Testing <b>API</b> with <b>Postman</b>, <b>Insomnii</b> and <b>Swagger</b></li><li>• Writing and reading technical documentation</li></ul>
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: <ul style="list-style-type: none"><li>• Adding new functionalities in accordance with the <b>Scrum</b> methodology</li><li>• Communicating with <b>client</b> and <b>Scrum Master</b></li><li>• File validation in terms of business logic</li><li>• Uploading, reading and saving a large number of files (mainly excel files) on the server</li><li>• Sending emails to customers who are in arrears with payment of their debts</li><li>• Testing <b>API</b> with <b>Postman</b>, <b>Insomnii</b> and <b>Swagger</b></li><li>• Writes and reads to the <b>PostgreSQL</b> relational database</li><li>• Creating new branches, resolving merge conflicts and adding changes to the repository via <b>Git</b> version control versions, and <b>GitLab</b></li></ul>
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: <ul style="list-style-type: none"><li>• Maintaining application state with <b>Vue Store</b> and <b>Angular NGRX</b></li><li>• Sending <b>REST</b> requests using <b>Vue Axios</b> and <b>Angular HttpClient</b> to the backend</li><li>• Generating mobile and desktop applications from JavaScript code using <b>Electron</b> and <b>Apache Cordova</b></li><li>• Dynamic display of backend data</li><li>• Implementation of new artwork using <b>VueJS</b> and <b>AngularJS</b>, and <b>bootstrap</b>, <b>material</b>, <b>tailwind css frameworks</b> and <b>SCSS</b></li><li>• Implementation of <b>API</b> endpoints using the <b>Laravel</b> framework compatible with the <b>MVC</b> pattern</li><li>• Implementing user rights and roles and generating authentication tokens using <b>Laravel Passport</b></li><li>• Implementation of writes and reads to the <b>MySQL</b> referential database</li><li>• Sending emails to users</li><li>• Testing <b>API</b> with <b>Postman</b>, <b>Insomnii</b> and <b>Swagger</b></li><li>• Creating new branches, resolving merge conflicts and adding changes to the repository via <b>Git</b> version control versions, and <b>GitLab</b>, and <b>RedMine</b></li><li>• Data analysis using the <b>Python</b> language and algorithms: <b>PCA</b>, <b>Logistic Regression</b>, <b>Random Forests</b>, <b>K- Means</b>, <b>K Nearest Neighbors</b> from <b>Sklearn</b></li></ul>

## 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**)