

Jakub Staszkowian

EDUCATION

10/2013 - 02/2017

University of Technology in Rzeszow

mechatronics

speciality: robotics and computer science

diploma thesis: Mechatronical device software within scope of occurrence of dyslexia risk

graduated with bachelor degree

09/2010 - 05/2013

1st HighSchool in Łańcut

secondary education

WORK EXPERIENCE

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Phone number:

667460169

Date of birth:

09.07.1994

Nationality:

Polish

05/2023 - to date

Al Software developer (C# / TypeScript)

Emagine Sp. z o. o.

Project for Maritime industry. Implementing an application for playing back ship movements in certain ports with ability to enable live view which streams data to UI in real-time with the smallest possible delay. Main challenges of project were it's code quality and performance of displaying multiple, dynamic objects (ships) moving simultaneously, both were mitigated.

Responsibilites:

- designing and implementing core functionalities on frontend and backend side.
- styling application,
- extending existing page layouts with new components,
- removing vulnerabilities from Docker images
- refactoring core components of application
- writing tests,
- configuring and testing build and release pipelines,
- developing infrastructure provisioning bicep scripts
- bug fixing and support,
- participating in Scrum ceremonies and presenting whole team's sprint achievements,
- presenting learned information on knowledge-sharing meetings
- migrating API tech stack from NestJS to .NET
- optimization of CosmosDb containers and queries
- using LLMs to speedup research and development processes

Technology stack: .NET 7.0, .NET 8.0, Web API, CosmosDb, MSSQL, MediatR, Azure DevOps, Swagger, Microsoft DI, Entity Framework Core, React, Redux, ChakraUI, ES Lint, Docker, Linux, Applnsights, Azure WebApps, Azure SQL, Microsoft Entra Id, GeoJSON, Mapbox, Bicep, Microsoft Copilot, Chat GPT, PearAI

04/2022 - 04/2023

Software developer (C# / TypeScript)

Engenious Sp. z o. o.

R&D project from IoT sector. Implementing a hub backend application for the whole IoT system used for gathering data, displaying it and configuring system settings for Electric Units such as: Power Plants, Wind Power Plants or even smaller facilities. My team's responsibility was to prepare frontend application in React to simplify process of displaying and configuring whole system settings and

backend API to properly format and stream data to core services used for communicating with real objects and change it's settings.

Responsibilites:

- designing and implementing core functionalities on frontend and backend side
- styling application,
- extending existing page layouts with new components,
- refactoring React application to use Redux
- writing unit, integration and E2E tests,
- designing and creating complex integrations between systems,
- configuring and testing build and release pipelines,
- bug fixing and support,
- participating in Scrum ceremonies and presenting whole team's sprint achievements.
- presenting learned information on knowledge-sharing meetings

Technology stack: .NET 5.0, .NET 6.0, Microservices, Web API, Postgresql, SignalR, MediatR, Refit, Azure DevOps, Swagger, nUnit, Microsoft DI, Entity Framework Core, React, Redux, Styled components, Antd, ES Lint, YAML, Docker, WSL, Linux, Lens, Modbus, IEC61850, Keycloak, Playwright

03/2021 - 04/2022

Software developer (C# / JavaScript)

Sii Sp. z o. o.

Continuation of a project for which I was working on between 02/2020 and 08/2020. The main goal of this part of a project is to refactor legacy systems using DDD approach. Now all services are being separated to small units with single responsibility. Applications communicate between each other using various channels such as events, queues, REST clients, etc. Project also includes frontend application refactoring and extending with new functionalities alongside.

Responsibilites:

- designing and implementing core functionalities on frontend side,
- fixing HTML/CSS/JS old-style and distorted layouts to be more responsive,
- extending existing page layouts with new components, creating HTML,
- writing unit and integration tests,
- writing framework to orchestrate generic activities which are dispatched via scheduled jobs and on-demand using API,
- writing mechanism to provide generic way to synchronise data between multiple databases/servers using SQL Bulk Copy feature,
- analyzing and writing stored procedures, triggers, views,
- creating complex integrations between systems,
- · Adding static code analysis tools to solution,
- configuring and testing build and release pipelines,
- bug fixing and support,
- participating in Scrum ceremonies and presenting whole team's sprint achievements,
- presenting learned information on knowledge-sharing meetings

Technology stack: ..NET Core 2.2, NET Core 3.1, Microservices, Web API, MS SQL, Azure DevOps, Swagger, xUnit, Microsoft DI, Entity Framework Core, Angular 11, SASS, KendoUI, ES Lint, YAML,

09/2020 - 02/2021

Fullstack .NET Developer

Diverse CG Sp. z o. o. Sp. K.

Project for British client (global company). Direct cooperation with coworkers (Poland, India). Main project's goal: develop platform used for managing Oxford English examining process - from registration, through administration, to presenting results to test takers. We are responsible for the whole process from database to release process. System consist of many applications with specific

purpose, eg. portal for test takers, portal for administrators, application for managing permissions and global settings, multiple APIs providing data, applications to version databases, etc.

Responsibilities:

- Designing and implementing new application features basing on requirements.
- Fixing bugs (backend and frontend)
- designing HTML, stylesheets and angularJS controllers and React components with Redux basing on mockups,
- Writing complex LINQ to SQL queries
- writing Unit tests,
- Configuring IIS
- Automating day-to-day processes using Powershell scripts
- Participating in design meetings

Technology stack: .NET and .NET Core (multiple versions), Web API, MS SQL, Azure DevOps, Octopus Deploy,Swagger, xUnit, Microsoft DI, Entity Framework Core, MJML, AngularJS, React, Redux, Custom UI framework with controls, Powershell. Redis

02/2020 - 08/2020

Fullstack .NET Developer

Sii Sp. z o. o.

Project for American client. Direct cooperation with such client (daily communication with PO). Main project's goal: extend existing solution used for managing marketing programs and output which they produce for users. We are responsible for the whole project from database to release process. Backend is written using DDD approach.

Responsibilities:

- Designing and implementing new application features basing on requirements,
- Fixing bugs (backend and frontend)
- designing HTML, stylesheets and angular components basing on mockups,
- Writing complex SQL queries (they were complex because of sophisticated business logic and size of database)
- writing Unit- and Integration tests,
- Configuring build pipelines
- Participating in scrum ceremonies

Technology stack: .NET Core 2.2, NET Core 3.1, Microservices, Web API, MS SQL, Azure DevOps, Azure Blob Storage, Swagger, nUnit, Microsoft DI, Entity Framework Core, Angular 8, SASS, KendoUI

10/2019 - 01/2020

Fullstack .NET Developer

Sii Sp. z o. o.

Project's main goal was to provide platform for managers, to help them track their subordinates's project allocation status. Application is designed to present and modify information when subordinate starts/ends project, how big is project allocation, etc.

Responsibilities:

- Designing and implementing new application features basing on requirements,
- designing HTML, stylesheets and angular components basing on mockups
- implementing search mechanism based on MS SQL Fulltext search,
- refactoring application introducing SOLID principles, normalizing database, clearing HTMLs and angular components.
- writing Unit- and Integration tests, participating in all scrum ceremonies,
- releasing application

Technology stack: .NET Core 2.2, Web API, MS SQL, Azure DevOps, Swagger, nUnit, Microsoft DI, Entity Framework Core, Angular 8, SASS, KendoUI, PrimeNg, Material Design

11/2018 - 09/2019

Software developer (C# / JavaScript)

Sii Sp. z o. o.

Project contains few apps: MVC App responsible for Grower and Supplier management, allowing to sign new agreements, reporting, generating excels, integrating with other provider's systems and exchanging data with them. WebApi used internally to search for Growers and their's data. MVC app responsible for digitalizing agreements signed in traditional way.

Responsibilites:

- · Azure Application Insights alerts,
- writing custom Excel workbook generation solution,
- fixing HTML/CSS/JS old-style and distorted layouts to be more responsive,
- extending existing page layouts with new components, creating HTML emails
- writing unit and integration tests,
- writing mechanism to generate mock data for testing,
- analyzing and writing stored procedures, triggers, views,
- creating complex integrations between systems
- managing branch builds on Bamboo
- launching deployments on Octopus deploy
- bug fixing and support
- participating in Scrum ceremonies and presenting whole team's sprint achievements
- presenting learned information on knowledge-sharing meetings

Technology stack: .NET 4.6.2, ASP.NET MVC5, Web API, MS SQL, Bamboo, Octopus deploy, Swagger, nUnit, Autofac, Entity Framework, Moq, Bogus, Azure App Insigths, XSLT, jQuery, KendoUI

07/2018 - 10/2018

Software developer (C#)

Sii Sp. z o. o.

Developing WebAPI for commerce used by Mobile and SPA apps, processing great amount of data connected with products and shops information. It's main purpose was data synchronization between different data sources.

Responsibilites:

- designing and developing new projects and functionalities ,
- writing unit tests,
- writing stored procedures, optimizing it's performance,
- creating complex SQL queries
- creating time-based launchers for specific operations

Technology stack: .NET Core 2.1, MS SQL, MongoDB, VSTS, Dapper, Automapper, MediatR, Swagger, xUnit, Hangfire

03/2017 - 05/2018

Software developer (C# / JavaScript) PGS Software S.A.

Project commissioned by client from airline industry. Collaboration with international team (Poland, Spain). Project scope includes providing WebAPI responsible for managing whole process of flight bookings. Some components were implemented using Azure cloud computing.

Responsibilites:

- implementing functionalities,
- analyzing and writing documentation,
- · designing functionalities,
- instructing new team members,
- writing unit tests

Technology stack: .NET Core 1.1, .NET Core 2.0, Web API, Azure CosmosDb, Azure Table Storages, Azure Functions, Azure Web App, Azure Service Bus, XSLT, XML, LINQ, jQuery, InjectusJS, HTML, Entity Framework, Microsoft DI, nUnit, Postman

10/2016 - 12/2016

Software developer (C#)

PGS Software S.A.

Internal application for advertisement management

Responsibilites: code refactoring, optimizing performance of LINQ to SQL queries, database structure refactoring

09/2016 - 12/2016

Software developer (C#)

PGS Software S.A.

Project purpose was to create tool which simplifies logging configuration and management.

Responsibilites: designing whole system, implementing functionalities

04/2016 - 08/2016

Intern (C# / JavaScript)

PGS Software S.A.

Application responsible for monitoring changes on development environments for another team.

Responsibilites: implementing functionalities

Technology stack: ASP.NET MVC, MS SQL, jQuery, Angular, LINQ, Logstash, Kibana, Elasticsearch, TeamCity, OctopusDeploy, Selenium tests, nUnit

OTHER/PRIVATE PROJECTS

Al agents optimizing life

Side project to learn an agentic approach to artificial intelligence. Main goal is to create a set of Al agents used for automating repeatable, time-consuming or boring activities. Project is still being developed, however so far I've created multiple agents responsible for: managing calendar (Google Calendar), managing e-mail inbox (Gmail), taking care of tasks (ClickUp), doing web research (Tavily), scrape Google Maps, answering company-related questions basing on RAG (Google Drive, Pinecone and Google Embeddings), voice agents (Elevenlabs, Twillio) for answering company related questions on the phone and summarizing customer requests when company owner is unavailable.

Responsibilites:

• building and maintaining infrastructure to run Al agents,

- building and testing automations,
- bugfixing

Technology stack: Linux, RaspberryPi, N8N, Google Gemini, APIs and services mentioned in description, Cloudflare, Docker, Docker-compose, Redis

IoT Hub

IoT Home – custom solution responsible for home automation management. Whole system contains of .Net Core API (written using Hexagonal architecture) responsible for synchronizing data from custom devices and signals sent through Mqtt protocol and storing them in NoSql database, C++ driven devices emitting and receiving signals from API and interpreting them appropriately. Project was developed in spare time. Production version was deployed on two RaspberryPi's (version 3). First has NoSql database server along with Mqtt server installed, both are configured as a services to be up when system is started. Second Raspberry Pi has dotnet in version 3.0 installed and runs core application. Project has also client application written in Angular 7 which use the same API to manage sensors data. Plans for future: finalize integration with Angular application, write application for Android devices (Xamarin), add new integrations: e.g. Google Assistant.

Responsibilites:

- designing system rules and mechanisms,
- writing API synchronizing data (.Net Core + MongoDb),
- integrating system with Amazon Alexa voice services,
- setting up Linux-driven production environment (.Net Core for Linux, MongoDb, Mqtt server) using Bash,
- developing applications (C++) launched in NodeMcu v3 responsible for emitting and receiving signals from API.
- designing hardware part of system including LED strips steering, temperature sensors, etc..
- writing unit- and integration tests,
- integrating API with Angular 7 client app.
- deploying applications to Linux and Windows Servers

Technology stack: .Net Core 2.2-3.0, MongoDb 4.0.12, Linux Ubuntu 18.04, nginx ARM64, Mqtt, Autofac, Amazon Alexa, IFTTT, Pubnub, nUnit, Moq, Bogus, Angular 7

FinanceAPI + PlanningAPI + InvestingAPI + Web + Mobile

Finance management – set of applications helping management of personal/home finances. System includes WebAPIs written in .Net Core 5.0-7.0 responsible for managing whole business logic and validation connected with storing information about: incomes, expenses and planning budget and free resources (FinanceAPI), private inventory of items in collections such as books along with incoming launches of continuation(PlanningAPI), current state of investing assets, comparison to model portfolio, brokers information and guidance for next investing steps (InvestingAPI). System also includes Angular 7 Portal app which is GUI for WebAPI and Xamarin. Android mobile app responsible for adding expenses to the queue integrated with API. Project is already being redesigned using DDD approach - Ports and adapters (also known as Hexagonal) architecture. Plans for future: remove identified problems found while using stable version, switch from SQL- relational data to NoSql approach, move from Windows to Linux architecture based on Raspberry Pi devices. New version which I'm currently working on will work in a containerized environment using Docker Compose.

Responsibilites:

- designing and programming application custom finance management logic design, implementing project from scratch with features such as logging, caching, DB integration, validation, etc.,
- extracting generic functionalities such as: logging, validation mechanisms, queue connection to separate NuGet packages and reusing it in different projects,
- extending existing Angular App with new components, services, etc.,
- upgrading Angular 2 to Angular 6 app,
- bugfixing,
- testing,
- · deploying of both API and client apps,
- creating data backups,
- migration from SQL to NoSql,
- setting up Linux infrastructure

Technology stack: .Net Core 2.1-3.0, MS SQL, Entity Framework Core, MongoDb 4.0.12, Linux Ubuntu 18.04, nginx ARM64, nUnit, Moq, Bogus, Angular 8, AMQP, Docker, Docker Compose

Infrastructure Apps

Multiple applications used as a store for generic logic used throughout all private applications. Contains lots of infrastructure code which is commonly repeated in most applications and before introducing this solution was written in each program from scratch. I wanted to avoid such problems so I invented this solution. Applications cover following functionalities:authentication, logging, queue management, generating Swagger documents, wrapping API responses, managing application settings, logic and model validation, abstraction for data access with implementations for Entity Framework Core and MongoDb, small framework for generating random data for test models and setting up Integration testing environment. Code from those applications is packed in NuGet packages and distributed via custom NuGet Server hosted in my private server cluster.

Technology stack: .Net Core, AMQP, Autofac, Bogus, NuGet Package Manager

GPS

Project realised in cooperation with University of Technology in Rzeszow. Xamarin app responsible for navigating through the building. Application created in a three-man team of developers.

Responsibilites: implementing functionalities, creating application GUI

ComicReader

Private project used for managing archive comic files (.cbr, .cbz, etc.)

DyslexiaRiskScale

Application created as supplement of diploma thesis. Responsible for measuring patient's skills on many fields and analyzing them within scope of occurrence of dyslexia risk.

LANGUAGES

English advanced (B2)

SKILLS

Operation systems: Windows, Linux

Programming languages: SQL, C#, HTML, CSS, JavaScript, TypeScript,

Powershell

Web technologies: ASP.NEW MVC5, WebAPI 2, HTML, CSS,

Frameworks: Entity Framework, .NET Core, LINQ, jQuery, Angular2-12, nUnit, Mock, Bootstrap, InjectusJS, Hangfire, Autofac, Dapper, React + Redux

Containers and servers: IIS, Nginx

Databases: MSSQL 2008, 2012, 2016, Azure CosmosDb, Azure Table

Storages, IBM As400, MongoDb

Version Control Systems: Git (GUI + console)

Project development and management tools: Jira, Trello, Taiga.io,

VSTS/Azure DevOps

Other: XML, XSLT, YAML, design patterns, Azure CosmosDb, Azure Table Storages, Azure Functions, Azure Web Apps, Scrum metodology, MJML, Redis

Tools: Visual Studio, Confluence, Jira, Jenkins, Source Tree, Visual Studio Code, Nuget Package Manager, Elasticsearch, Logstash, Kibana, Postman

TRAININGS & CERTIFICATES

Trainings:

- 2018: Internal Training AGILE software development
- 2019: RaspberryPi in IoT
- 2019: Angular + RxJS
- 2020: Microservices.NET
- 2021: Docker Maestro

Courses:

- ECDL Core
- Microsoft 70-532 exam developing Azure Solutions

LINKS

https://www.linkedin.com/in/jakub-staszkowian

PERSONAL INTERESTS

reading, japanese culture and history, Internet of Things, investing

