# **Dušan Blanuša**

Electrical and computer science engineer



## Personal information:

#### Website:

www.dusanblanusa.com

# Date and place of birth:

19.01.1998. Kragujevac, Serbia

#### Residence:

Novi Sad, Serbia

#### **Phone Number:**

+381645763494

#### Email:

blanusadusan@yahoo.com

# Technologies:

**Programming Languages**: Python, Java, JS

Al Technologies: LLMs, Evolutionary Algorithms, OpenCV, Keras, Tensorflow, NLTK, NLP, OCR, Spacy, Scikit-learn, Gensim, Yolo, Keras, Pandas, SARIMA

**Database**: Oracle, MySQL, PostgreSQL, MongoDB, Neo4j, Elastic, CosmosDB

**IDEs**: Visual Studio, PyCharm, VSCode

**Methodologies**: Agile, Scrum Project Management Tools: JIRA, Git, Miro

Operating Systems: Linux, Windows

# Education

### Bachelor of Electrical and Computer Engineering

Faculty of Technical Sciences, University of Novi Sad Pursuing master's degree in electrical and Computer Engineering

Faculty of Technical Sciences, University of Novi Sad

TRAINING/ CERTIFICATIONS
NLP Training – Synechron
Azure AI 900

# **Synopsis**

- Artificial Intelligence engineer with over 4 years of experience in a field of Artificial intelligence and Data Science
- Strong knowledge in Machine Learning, Data Science, Natural Language Processing and Computer Vision
- Proven experience developing in Python and Java programming languages while working on various projects
- Experience in working in a distributed team environment, following Agile/SCRUM methodology
- Professional with strong analytical and problem-solving skills, eager to learn new skills and grow professionally
- Motivated, supportive and communicative team player with a proactive attitude

# Experience

# • Technology Lead | Synechron

(Apr' 2021 to present)

- Developing modern AI solutions from initial ideas and creating POCs and MVPs, through designing architecture, implementation, monitoring team progress, organizing tasks, to presenting final solutions to client executives.
- Communication with clients, understanding their issues, and negotiating workflow in line with their requirements and feasible objectives.
- Team leadership and resource organization.
- Conducting AI trainings for juniors.
- Conducting interviews for new hires.
- Delivering lectures on the applications of modern AI solutions, predominantly LLMs
- Presenting the company and delivering lectures about it.

## • Intern | Synechron

(Sep' 2020 to Nov' 2020)

- The internship included work on projects based on NLP systems and recommendation systems using the Python programming language.
- Involved in Python programming and creating AI models.
- Responsible for data research and data analysis.

# Programmer | Memristor Robotics

(Feb' 2019 to Aug' 2020)

- Worked part-time on creating computer vision solutions for the robots.
- Utilized the Python programming language with various libraries for computer vision and artificial intelligence, across Linux operating systems.
- Team leadership and resource organization, from creating datasets to the final implementation.

## Teaching assistant | Faculty of Technical Sciences

(Oct' 2018 to Jul' 2019)

- Teaching assistant at the Department of Computer Technology and Computer Communications.
- Teaching assistant at the Department of Applied Computer Science and Informatics.

### Editor | emobilnost.rs

(Jan' 2018 to Oct' 2018)

- Worked on articles about autonomous vehicles, systems for their control, and the safety of modern autonomous vehicle systems.
- Maintained a website.

#### • Deep analysis of XML documents | Synechron | Artificial Intelligence engineer | Team size: 7

- Responsibilities: Creation of a custom parser for narrow-domain documents in XML format, system for linking logical parts of different documents and RAG system on top of that.
- o Enviropment: Python, Neo4j, CosmosDB, Azure Al search, OpenAl, Langchain, Azure DevOps

#### Chatbot based on RAG system | Synechron | Technology Lead | Team size: 5

- Responsibilities: Planning project and creating Miro board graphs. Designing and coding project architecture, databases and chatbot intents and dialogs. Leveraging LLMs with Azure Bot Framework
- o Enviropment: Python, Azure Bot Framework, MongoDB, CosmosDB, Elastic search, Azure AI search, GIT

### Technical Insights Generator | Synechron | Technology Lead | Team size: 4

- Responsibilities: Planning project. Designing and coding project architecture and databases. Organizing team and programming tasks. Creating topic modeling, trend monitoring, summarization and report-creating systems. Leveraging LLMs and other AI tools for topic analysis, clustering and text summarization
- o Enviropment: Python, MongoDB, Neo4j, GPT, FastAPI, GIT

#### Intelligent retirement adviser | Synechron | Artificial Intelligence Engineer | Team size: 2

- Responsibilities: Planning and creating systems for personalizing retirement plans, calculating ideal retirement plan for desired goal,
   calculating pension payments and duration, customized economics interest and loan formulas. Creating intelligent retirement
   planning adviser based on evolutionary algorithms and custom fitness functions
- o Enviropment: Python, Evolutionary Algorithms, SARIMA, FastAPI, GIT

### FAQ LLM Chatbot | Synechron | Artificial Intelligence Engineer | Team size: 4

- Responsibilities: Making FAQ chatbot for corporate questions. Creating systems for collecting company data and for question answering based on provided context, leveraging LLMs
- o Enviropment: Python, MongoDB, GPT, GIT

#### LLM coding assistant | Synechron | Artificial Intelligence Engineer | Team size: 4

- o Responsibilities: Leveraging different LLMs in coding assistant system, prompt engineering.
- o Enviropment: Python, LLMs, MongoDB, GIT

### • Involvement predictions | Synechron | Artificial Intelligence Engineer | Team size: 6

- o Responsibilities: Automating the manual task of classifying companies on over 40 classes based on collected data and creating intelligent systems to draw conclusions and streamline the work for data analysts. Communicated with four different teams to understand their needs and integrated their ideas into a successful solution that is now in use. Creating query based prescreening for classifying documents, based on queries written in natural language, and automated parser for those queries.
- o Enviropment: Python, MongoDB, Flask, NLTK, GIT

# • Phone damage claims based on computer vision | Synechron | Artificial Intelligence Engineer | Team size: 1

- o Responsibilities: Making system for phone damage claims based on detecting broken phones on images provided by customers.
- o Enviropment: Python, Yolo, Mediapipe, SAM, OpenCV, GIT

### Computer Vision for Robots | Memristor | Computer Vision Team Lead | Team size: 3

- Responsibilities: Creating systems for object detection, classification and localization. Making datasets, processing data, training models and using in real systems.
- o Enviropment: Python, YOLO, OpenCV, Raspberry pi, GIT

## Software for Autonomous Robots Movements | Memristor | Python Developer | Team size: 6

- o Responsibilities: Programming robots for competitions. Leading and organizing team.
- Enviropment: Python, Raspberry pi, GIT

### Personal website

- Responsibilities: Designing and programming website and chatbot, deploying backend and frontend.
- Enviropment: Python, Angular, FastAPI, GPT

# **Additional Interests**

- Photography
- Road Trips
- Cycling

Hobby programming

- Travel
- Camping
- More about personal projects on www.dusanblanusa.com