Sergei Bogdanov

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Github: https://github.com/Serega 6678

EDUCATION Moscow Institute of Physics and Technology, Dolgoprudny

Department of Innovations and High Technology

Bachelor of Applied Mathematics and Computer Science September 2018 - August 2022.

Data Analysis Department by Yandex

Student of Advanced Deep Learning and Advanced Algorithms classes

TECHNICAL SKILLS

Languages: Python, C++, C

Database: PostgreSQL

Tools/Framework: Pytorch, Torch Geometric, SkLearn, NumPy, Pandas, SciPy,

MatPlotLib, Seaborn, Wandb

General: Machine Learning, NLP, Advanced Algorithms and Data Structures,

Object Oriented Programming and Concurrency

WORK EXPERIENCE

JetBrains NLP researcher

July - early September

GPA: 7.93/10.00

- Used classical NLP methods and Graph Convolutional Neural Networks for method name generation task. The models were using abstract syntactic tree as an argument. My best result is 5% better than Code2Vec model and comparable to Code2Seq model with disabled Attention (my model didn't have an attention mechanism too)
- Researched difference in common patterns generated by the models above
- Used classical NLP methods and Graph Convolutional Neural Networks for Code-SearchNet task (the goal is to find the code from the given dataset by it's description)

Top-20% out of all participants.

• Held a research about common AST structure patterns and developed vertex classification system which covers more than 98% of all possible cases with extremely low memory usage. My algorithm is 8 times more memory-efficient than simple greedy approach and shows 10% better coverage on bigger dictionary sizes.

FAVOURITE PROJECT

Currency exchange rate bot

May 2019

Telegram bot, which can send currency exchange rates, provided with the database (to make calculations easier) and exchange rate visualizer.

- Technology/Tools: Python, SQLite3, TeleBot, MatPlotLib and SciPy.
- $\bullet \ \mathbf{Link:} \ https://github.com/Serega6678/Python/tree/master/PythonCodeReview2-master \\$

OTHER
PROJECTS &
HYPERLINKS

- Kaggle competition solutions
- Laptop Manufacturer's Database
- Cryptocurrency market analysis with Python, Pandas, NumPy and MatPlotLib
- C++ single player game (programming patterns utilization)
- C++ advanced algorithms implementation

CERTIFICATION

Reinforcement Learning and Unsupervised Learning

by Moscow Institute of Physics and Technology and Yandex

Verify: https://www.coursera.org/account/accomplishments/verify/EYHNNNPLTXH8, Verify: https://www.coursera.org/account/accomplishments/verify/MNQT3WN3B78C

CS224n: Natural Language Processing with Deep Learning

by Stanford University and DeepPavlov

Course repository.