Albert Mukhametov

Email: zcabukh@ucl.ac.uk LinkedIn — Website — GitHub Mobile: +44-734-230-44-95

EDUCATION

University College London (UCL)

London, UK

Bachelor of Science in Computer Science; Grade Achieved: 1st Class

2019 - 2022

o Relevant modules taken: Software & Systems Engineering, Concurrency & Architecture, Security, Logic & Database Theory, Mathematics & Statistics, Compilers

The International School of Azerbaijan (TISA)

Baku, Azerbaijan

International Baccalaureate Diploma Programme (IBDP); Grade Received: 40/45 (top 3.6%)

2017 - 2019

Experience

NLP & Data Mining Research - Intern (GitHub)

London, UK

University College London

June 2021 - Present

- Leveraged Latent Dirichlet Allocation (LDA) & Support Vector Machine (SVM) algorithms to classify 200,000+ publications and 300.000+ researchers across the institution
- o Established reliable data mining engine and data processing infrastructure, deployed on Microsoft Azure
- Delivered usable front-end using Django framework for data visualization (t-SNE clustering, Intertopic Distance Map, Bubble chart), analysis & validation
- o The tool is used by researchers for annual mapping of ongoing Sustainable Development Goals activity, as well as author extraction for inter-disciplinary and cross-departmental collaboration evaluation

Data Scraping & Analytics Start-Up - Co-Founder

London, UK

LodusLabs

May 2020 - Present

- o Collaboratively developed data mining infrastructure to gather current & historic video-game statistics for over 35,000 games and 20,000 game developers through time-triggered web-scrapers using Microsoft Azure Functions
- Delivered a reliable back-end structure for data storage leveraging SQL Server, deployed on Digital Oceans' Droplet cronjobs
- Currently in partnership with Amazon's subsidiary IGDB

Robotics Process Automation - Intern

Baku, Azerbaijan

Baku Higher Oil School (University)

October 2018 - November 2018

o Managed a team of Undergraduate and Postgraduate students in the Process Automation Engineering Department to develop and successfully pitch viable automation of a daily task to the Head of the Department

Software Engineer - Intern

Baku, Azerbaijan

Nikoil Bank

November 2017 - March 2018

- Redesigned the national (Azerbaijani) credit registry of the Nikoil Bank in a fast-paced team of six developers
- o Advanced Java implementation of the monitoring system for the ATM's across the capital city of Baku

TECHNICAL SKILLS & LANGUAGES

- Languages & Tools: Python, C. Java, Haskell, Microsoft Azure, Django, MongoDB, Docker, Microsoft SQL Server, PostgreSQL, Git, Algorithms, Data Structures, HTML5/CSS, Quartus Prime
- Russian: (Native or Bilingual Proficiency), English: (Native or Bilingual Proficiency) Azerbaijani: (Elementary Proficiency)

Projects

- Java Shell (JSH) 2021 (GitHub)
 - Refactored Java Shell implementation, leveraging Antlr to create an input parse tree
 - o As part of TDD conducted the following: system acceptance, 99% Jacoco branch coverage, JUnit, JumbleJ mutation tests
 - o Developed pipe, sequence, call, input redirection, input substitution, as well as an unsafe version for each application
- Computer Vision 2020 (GitHub)
 - Implemented a depth map using a stereo-matching algorithm following the dynamic programming optimisation method
 - Integrated colour gradient to infer the relative distance to the object and its captured surroundings

ACCOMPLISHMENTS

- Valedictorian Scored 1st for two consecutive years in the International Baccalaureate Diploma Programme, 2019
- Mathematics Higher Level scored 7/7 in the IBDP final examination (top 6.79%), 2019
- Co-founder of the TISA Entrepreneurial Club, lead a team to build and maintain a solar panel charging dock, 2017 2019

Hobbies and Interests

- Competitive Swimmer Swimmer for the junior Olympic team in Russia (2008 2012) and in Azerbaijan (2012 2017)
- Scuba Diving Professional Association of Diving Instructors (PADI) certified scuba diver (2019 Present)