

# Albert Mukhametov

LinkedIn — Website — GitHub

Email : zcabukh@ucl.ac.uk

Mobile : +44-734-230-44-95

## EDUCATION

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- **University College London (UCL)** London, UK  
*Bachelor of Science in Computer Science; Grade Achieved: **1st Class*** 2019 - 2022
  - Relevant modules taken: AI & Neural Computing, Software & Systems Engineering, Concurrency & Architecture, Security, Logic & Database Theory, Mathematics & Statistics, Networking Systems, Compilers

## EXPERIENCE

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- **Software Engineer (Back-end)** London, UK  
*Checkout.com* September 2022 - Present
  - Built numerous RESTful APIs as part of the risk assessment analytics pipeline for card payment processing
  - Delivered, tested, and deployed fraud detection platform back-end features leveraging C#/.NET, Docker, AWS (S3, EC2), PostgreSQL, Couchbase, and TeamCity
- **Data Scraping & Analytics Start-Up - Co-Founder** London, UK  
*LodusLabs* May 2020 - September 2022
  - **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-scrappers 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**
- **NLP & Data Mining Research - Intern (GitHub)** London, UK  
*University College London* June 2021 - September 2021
  - Leveraged **Latent Dirichlet Allocation (LDA)** & **Support Vector Machine (SVM)** algorithms to classify 200,000+ publications and 300,000+ researchers across the institution
  - 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
  - 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
- **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
  - **Advanced** Java implementation of the monitoring system for the ATM's across the capital city of Baku

## TECHNICAL SKILLS & LANGUAGES

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- **Languages & Tools:** Python, C, Java, Haskell, C#, .NET, AWS, MS Azure, Django, Docker, TeamCity, MongoDB, MS SQL Server, PostgreSQL, Git, Algorithms, Data Structures, HTML5/CSS
- **Russian:** (Native or Bilingual Proficiency), **English:** (Native or Bilingual Proficiency) **Mandarin:** (Elementary Proficiency)

## PROJECTS

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- **Java Shell (JSH) 2021 (GitHub)**
  - **Refactored** Java Shell implementation, leveraging Antlr to create an input parse tree
  - As part of **TDD** conducted the following: system acceptance, **99%** Jacoco branch coverage, JUnit, JumbleJ mutation tests
  - 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

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- **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

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- **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)