
Education

- 2014–Present **American University in Bulgaria**, Blagoevgrad, Bulgaria.
Bachelor's degree in Mathematics
Expected graduation: May 2018
- 2010–2014 **Specialized Educational Scientific Center of Ural Federal University**, Russia.
Specialized in Math and Physics.
Participated in programming, math, physics, and linguistics olympiads.
- Jun 2012 **Summer Informatics School: Advanced Algorithms**, Russia.
Studied data structures, algorithms on graphs and strings, and advanced techniques of dynamic programming.
- Jun 2011 **Summer Informatics School: Computer Security**, Russia.
Studied web security, computer networking, cryptography, basics of reverse engineering, and assembly language.
- 2007–2012 **Math and Informatics School of Institute of Math and Mechanics**, Russia.
Prepared for math and programming competitions for several days every 3 months.

Experience

- Summer 2016 **Google – Software Engineering Intern**, Mountain View, CA.
– Created large-scale data processing pipelines for a crowdsourcing platform.
– Built TensorFlow models for computer vision.
– Used scikit-learn, interactive notebooks, and SQL for data analysis.
– Wrote Java, C++, Python, and JavaScript.
- Feb–Mar 2015 **MeStoryline – Software Engineer**.
part-time
– Built a prototype of a video journal web app.
– Used Flask and MoviePy for uploading and processing videos in S3.
– Deployed to AWS Elastic Beanstalk.
– Customized a Video.js player.
- Oct 2014–May 2016 **AUBG Talks – Webmaster**.
part-time
– Maintained a Wordpress [website](#).
– Updated and further developed a YouTube commenting [plugin](#) for Wordpress.
- Oct 2014–Aug 2015 **Freelance Programmer**, Upwork.com.
occasionally
– Developed data processing scripts (in Python, Perl, Bash, and PHP),
– Google Chrome extensions,
– a Google Apps email processing solution,
– an image recognition solution.

Projects

- Apr 2016 **Scheduler** github.com/slava-sh/scheduler
Job distribution system for judging programming competitions in real time.
Evolutionary algorithm optimizes testing performance.
Written in Go in 1 week.
Ranked 4th out of [104 solutions](#).
- Jan 2016 **Timus Friends** github.com/slava-sh/timus-friends
Google Chrome extension that adds one-way friending functionality to the competitive programming website called [Timus Online Judge](#).
- Jul–Sep 2015 **Messenger** github.com/slava-sh/messenger
Messaging platform with a microservice architecture.
Technologies: Docker Compose, Django REST framework, RabbitMQ, Node.js, ReactJS, SockJS, and nginx.
- May 2015 **Monty Hall** monty-hall.ucteam.ru
Browser game about the famous probability paradox.
Written with Laravel PHP framework and Python's svgwrite.

- Apr 2015 **Code Plagiarism Detector** github.com/slava-sh/code-plagiarism-detector
I was challenged with detecting plagiarized solutions on programming competitions and came up with a relatively simple but efficient machine learning solution.
Technologies: C++, R, Pandas, Matplotlib.
- Jan 2015–Present **Klavaro** slava-sh.github.io/klavaro
Esperanto keyboard for iOS.
I used an open-source keyboard component and implemented word suggestions using a Markov chain.
- Dec 2014 **Umqra** slava-sh.github.io/umqra/enemy-rush.html
Web browser game written in Elm, a Haskell-inspired functional language.
- Nov 2014 **Reduced Ordered Binary Decision Diagrams** github.com/slava-sh/robdd
I developed this Haskell library for manipulating Boolean functions after reading a paper on the subject.
- May 2014 **Paper Generator Website** ucteam.ru/ref
The site asks you for the information for the title page and generates a paper.
The papers are assembled from LaTeX templates and precompiled PDF pieces.
The website is written with PHP and Twitter Bootstrap.
- Oct 2013 **High School Schedule Website** ucteam.ru/tablo
My high school has a webpage with the class schedule for the next couple of days. Students come to check the schedule every day. I created a cleaner and more informative version using PHP and Twitter Bootstrap.

Contributions

- Apr 2016 **Stack Overflow**
- Found a serious security vulnerability on stackoverflow.com.
 - Featured on the [Stack Exchange Security Hall of Fame](https://stackexchange.com/hall-of-fame).
- Jul 2015 **gunicorn**
- Python WSGI HTTP server.
- Fixed a bug.
 - Improved documentation.
- Jun 2015 **youtube-dl**
- Command-line program for downloading videos from various websites.
- Added support for the nova.cz network.
- Dec 2014 **memrise2anki**
- Plugin for a spaced repetition flashcard program.
- Extended functionality.