

# DENNIS KRASNOV

Software Engineer

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## PROGRAMMING

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Java, Kotlin, Spring  
Python, Flask  
HTML/CSS, JS, React  
Dart, Flutter  
Rust, C++, C  
PostgreSQL, Redis, Firestore

## TECHNOLOGIES

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Linux, Docker, Kubernetes  
GCP, AWS, Digital Ocean  
Git, CI/CD, Bash scripting

## SKILLS

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Full-stack Development  
Gathering Requirements  
UI/UX Design  
Mobile Applications  
Test-Driven Development

## LANGUAGES

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Native English  
Native Russian  
DELF B2 French

## HOBBIES

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Powerlifting  
Nutrition  
Board Games

## WORK

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### Ultimate Software

Sep 2019 – Dec 2019

*Software Engineering Intern*

- Developed authorization microservices in identity platform team
- Modified critical identity gateway serving 51M users, added permissions claim to JWT, refactored to prevent zero trust authorization recursion
- Identified production-level architecture issue in event sourcing which would break future migrations, documented and escalated to tech lead
- Java, Axon Framework, Spring, CQRS, event sourcing, ForgeRock IG

### Krasnov Tech

Jun 2018 – present

*Self-Employed Freelance Developer*

- Founded business, acquired customers, built projects start to finish:
- [sgbiotec.com](https://sgbiotec.com) is an online store selling lab-grade fluorescent proteins
- Pocket Trade Show is a web/mobile tradeshow platform for salesmen
- React, MobX, Shopify storefront API; PHP 7, jQuery, MySQL, AWS S3

## PROJECTS

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### Diet Driven

- Event-driven calorie counter mobile app for iOS, Android, web
- Conducted usability studies, designed UI and system architecture
- Created gRPC-based streaming backend, reactive state management
- Flutter, Dart, Kotlin, Axon Framework, event sourcing, CI/CD, ScyllaDB

### Neural Network Driving

- Won gold at Canada-Wide Science Fair, shortlisted for Intel International Science Fair, and met Justin Trudeau at invite-only PM's Science Fair
- Created autonomous car simulation trained with reinforcement learning
- Built physics engine, UI, and machine learning algorithm from scratch
- Java, JavaFX, ANN, neuroevolution, multi-threading, batch-processing

### Chess

- Won school's computer science Course and Department Awards
- Created complete game of chess with clean object-oriented architecture
- Implemented recursive win-checking, game replay, 4 AI algorithms
- Java, Swing, animation, game theory, alpha-beta pruning

## EDUCATION

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### University of Waterloo

Sep 2018 – Apr 2023

*Bachelor of Computer Science, honours co-op*

- Coursework: data structure analysis, OOP programming in C++, algorithm analysis, operating systems design, computer architecture