# Anton Lykov

+1-310-614-6924 | antony.lykov@gmail.com | antonlykov.com | github: anton5798

## EDUCATION

**University of Washington, Seattle** — Seattle, WA
*M.S. + PhD in Computer Science* — Jan 2021 – Current
- GPA: 3.9/4.0. Interests: large scale ML, probability theory, data management. Advisor: Dan Suciu.

**University of California, Los Angeles** — Los Angeles, CA
*B.S. in Computer Science, B.S in Mathematics* — Sept 2016 – June 2020
- GPA: 3.87/4.00, Magna Cum Laude, Dean's Honors List 10/12 quarters

Rel. coursework: ML for Big Data, Data Mining, Statistical Model, Distributed Systems, Probability Theory

## SELECTED WORK EXPERIENCE

**RelationalAI** — Berkeley, CA
*R&D Intern* — Summer 2022
- Integrating a query compiler featuring a unique worst-case optimal join algorithm into main DB engine

**Amazon Web Services, Redshift** — East Palo Alto, CA
*Software Engineering Intern* — Summer 2021
- Worked in Redshift Serverless team. Optimizer cluster auto scaling algorithm configuration.
- Suggested a parameter tuning approach that led to significant reduction of $ cost & query response time.

**NAND Capital** — San Francisco, CA
*Research & Development Intern* — Fall 2020
- Information theory HFT hedge fund. I was the 6th employee in the company.
- Researched & implemented options pricing models (Black-Scholes, variations of the Binomial)

**Amazon Web Services, Redshift** — East Palo Alto, CA
*Software Engineering Intern* — Summer 2020
- Part of early Redshift ML project, allowing users to train/use ML models using SQL (launched 2021).
- Integrated SageMaker inside Redshift to perform ML inference. My POC is now used in production.

**Yandex** — Moscow, Russia
*Software Engineering Intern* — Summer 2019
- Optimized performance of internal networking modules related to establishing secure connections.
- Improved behavior of HTTP client Web Module for push-notification services.

**Jet Propulsion Lab & B John Garrick Institute for Risk Sciences** — Los Angeles, CA
*Research & Development Intern* — Jan 2018 – Dec 2018
- Developed an engine that performs Probability Risk Assessment for complex systems (C++, Python)

## SELECTED AWARDS

- Our paper **On the Tractability of SHAP Explanations** won AAAI Distinguished Paper Award at **AAAI 2021**: **top 0.2%** of all submissions. (2021)
- **ACM ICPC: 8th place** on ICPC South California Regionals, top 3 teams at UCLA. (2019)
- Frank Peters **Scholarship for Engineering** Recipient at UCLA Samueli Engineering (2019)
- **1st place:** California Capture the Flag – Cybersecurity hackathon (2018)
- **Top 10 of 75+ teams:** DataFest – Data Science & Machine Learning hackathon (2018)
- **Finalist (3 times):** National Russian Olympiad in Mathematics (2014, 2015, 2016)
- **1st place:** International Tournament of Towns Olympiad in Mathematics (2015)

## TEACHING & LEADERSHIP

**UCLA Olga Radko Endowed Math Circle** — Los Angeles, CA
*Lead Instructor* — Oct 2016 – June 2020
- Lead 20+ high school students; 150+ hours of teaching total; prepared students for math Olympiads