

Narek Galstyan

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LinkedIn: <https://linkedin.com/in/ngalstyan>

Portfolio: <https://ngalstyan4.github.io>

Education

Princeton University , Princeton, NJ	B.S.E. Computer Science	Sep 2016 – Jun 2020
Math/Physics: Adv. Vector Calculus, Adv. Linear Algebra, Applied Algebra, Quantum Physics		
CS Theory: Machine Learning, Theory of Computation, Algorithmic Game Theory		
CS Applications: Functional Programming, Computer Vision, Computer Graphics, Information Security		
CS Systems: Adv. Computer Networks, Adv. Programming Techniques, Operating Systems, Distributed Systems		
ETH Zurich , Zurich, Switzerland	Computer Science exchange student	Sep 2019 – Jan 2020
UWC Adriatic , Duino, Italy	International Baccalaureate(IB) Diploma Programme	Sep 2013 – May 2015

Software Development Experience

Researcher & Software Engineer	Princeton Systems Lab , Princeton	Jul 2019 – Sep 2019
<ul style="list-style-type: none">Examined Linux kernel initial boot sequence and identified optimizations resulting in x1.5 boot time improvement		
Software Engineer, Part-time	TimescaleDB Inc , New York	Sep 2018 – Jun 2019
<ul style="list-style-type: none">Led the efforts to test, adapt and deploy TimescaleDB on RaspberryPi and developed CI/CD for itImplemented enterprise database features and helped clients deploy TimescaleDB on edge		
Software Engineer, Intern	TimescaleDB Inc , New York	Jun 2018 – Aug 2018
<ul style="list-style-type: none">Collaborated with engineers and communicated with user base to identify needed features and develop themDesigned and implemented data archiving functionality in C on underlying PostgreSQL API of TimescaleDBWrote an SQL query deparser in C that helps to serialize existing structures in PostgreSQL for transferAdded support for several aggregate functions requested by the community including LOCF and EWMA		
Full-Stack Developer	Liechtenstein Institute , Princeton University	May 2017 – Jul 2017
<ul style="list-style-type: none">Developed an integrated system to seamlessly chart the usage of keywords in historical documentsCreated and configured a Solr and Node.js server on an EC2 instance with Vue and Chart.js dashboard		
Analytics and Big Data Engineer	Forkize , Yerevan, Armenia	Sep 2015 - Aug 2016
<ul style="list-style-type: none">Learned and evaluated tradeoffs between several SQL and NoSQL solutions for mobile app event data storageDesigned and implemented an analytics engine using Javascript backed by ClickhouseDBCreated, benchmark tested and maintained Hadoop and Apache Spark cluster on AWS EC2		

Technical(Related) Experience

Teaching Assistant	Information Security (COS 432) , Princeton University	Sep 2018 – May 2019
<ul style="list-style-type: none">Grade programming and security design assignments and develop assignment infrastructure		
CS Lab Teaching Assistant	Introductory Computer Science courses	Sep 2017 – Present
Promoted to Head TA (COS 126, COS 226, COS 217 and COS 109)		
<ul style="list-style-type: none">Write scripts to update computer clusters on campus with necessary CS department softwarePrepare interview materials for interviewing and hiring new TAs, conduct training after hiring		
Student Technology Consultant	Office of Internet Technologies , Princeton University	Sep 2017 – Jan 2019
Workshop Leader, Cryptography	Tumo Center for Creative Technologies , Yerevan	Jun 2018 – Aug 2018
<ul style="list-style-type: none">Prepared materials and taught basics of cryptography to a group of 20 high school students		
Workshop Leader, Machine Learning	Tumo Center for Creative Technologies , Yerevan	Jun 2017 – Aug 2017

Projects

Write bare metal OS kernel in Rust	Independent research advised by Prof. Amit Levy	Jan 2019 – May 2019
<ul style="list-style-type: none">Designed and implemented hardware abstraction layer for x86 and wrote a minimal kernel mostly in safe Rust		
Princeton Assistant app on Alexa	HackPrinceton , Princeton University	March 2017

Languages and Technologies

Software/hardware: C, Rust, Java, Javascript, Python, OCaml, Arduino, Assembly x86-64, Linux

Big Data/DBs: PostgreSQL, TimescaleDB, Apache (Spark, Hadoop, Kafka), Google BigQuery, Yandex Clickhouse

Extracurriculars

Princeton University Robotics Club & Princeton University Climbing Team