

David Khachatryan

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EDUCATION

Northwestern University — *Evanston, IL*

Masters of Science in Robotics December 2025

University of Wisconsin-Madison — *Madison, WI*

Bachelor of Arts in Computer Science December 2022

SKILLS

Software: Python, C++, Swift, Kotlin, Javascript, OpenCL, Assembly, SQL, Java, Golang, Bash, OOP

Tools: ROS2, Gazebo, Django, Node.js, Three.js, Spring Boot, React.js, MaterialUI, AR/VR, XCode, tmux

DevOps: Git, Linux, Docker, AWS[RDS|EKS|EC2|Lambda], Prometheus, Ansible, Apache

Machine Learning: OpenCV, PyTorch, Cuda Programming, ConvNets, FFTs, Transformers, GANs

Other: CircleCI, Jenkins, Kubernetes, Microcontrollers, Test-Driven Development

WORK EXPERIENCE

EL Tracker — el-tracker.com

October 2023 – Present

Founder and Solo Developer

Chicago, IL

- Created a new Chicago transit tracker iOS app with Swift, Django, and Node.js. Android in progress
- Received 3000+ downloads, an overall 5 star rating, and reached #46 in nationwide navigation apps
- Integrated user feedback to achieve low-vision user accessibility and screen-reader compatibility
- Developed iOS widgets, live maps, push notification, and Apple Watch support
- Negotiated a partnership deal with Transit Tees to secure user base growth and operation costs

Sunrise Futures

January 2023 – January 2024

Senior DevOps Associate

Chicago, IL

- Developed a high-impact monitoring tool in JavaFX, React, and C++ for hundreds of trading programs
- Established custom SQL to deprecate legacy Perl module files for configuring trading strategies
- Tested trading programs, Python scripts, and configs daily — releasing via Docker and Ansible
- Resolved issues in European and Asian markets in night rotations, ensuring continued profitability
- Mentored junior developers through weekly meetings, teaching them company infrastructure, troubleshooting production issues, and resolving errors to maintain trading system continuity.

Datachat

January 2022 – January 2023

Software Engineer

Madison, WI

- Integrated clustering models, such as K-means, in a data analytics platform via PyTorch and BigQuery
- Pushed new ML features for clients such as Meta, by integrating feedback from biweekly meetings
- Led a ground-up refactoring project to upgrade MUI based React components from v4 to v5
- Conducted daily development using React/Redux/Saga, Python, and Golang

FEATURED PROJECTS

Gesture-Controlled Robot with AR Glasses & ROS2

December 2024 – Present

- Used MediaPipe to detect hand gestures and control a mobile robot via ROS2 over a LAN connection
- Implemented feedforward control for precise and responsive robot movement

Robot Whack-a-mole Player

November 2024 – December 2024

- Collaborated to program a 7-DOF arm with ROS2 MoveIt library to control a servo-driven hammer
- Applied OpenCV for real-time mole detection and responsive gameplay

Professional Chess Player — 2100 USCF Rated, 99th percentile on Chess.com.

Apr 2009 – Present