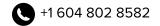
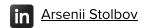
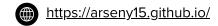
Arsenii Stolbov









EDUCATION

University of British Columbia | Vancouver, BC | Sep 2021 - Present

Bachelor of Science - Computer Science & Chemistry (Combined Major in Science)

- Coursework: Data Structures & Algorithms, Machine Learning, Relational Databases, Computer Networking, Computational Chemistry.
- Honors: International Major Entrance Scholarship (IMES) at UBC
- Activities: Professional Ice Hockey Player (2007 2021)

Certificate in Project Management | Google (Coursera) | Aug 2025

WORK EXPERIENCE

Al Software Developer | Buffoli Industries (Brescia, Italy) | Summer Internship | May 2025 - Aug 2025

- Built a 3-stage RAG + Angular UI; cut time-to-first-answer at p95 by ~30%.
- Switched to docs-first retrieval; reduced web calls by roughly half and drove a double-digit gain in internal-doc hit rate.
- Optimized CSV/MSG ingestion; throughput up 2–3× and peak **RAM down by about one-third to one-half** on large files.
- Implemented end-to-end RBAC (admin/read/write/none); unauthorized visibility incidents eliminated.
- Added a GraphRAG route; improved multi-document answer success on internal evaluations.
- Modularized the pipeline and added context guards; over-length crashes eliminated and release friction reduced.

Software Engineer | Gidrolock - Smart Water-Leak Protection (Moscow, Russia) | Internship | Jan 2023 - Jan 2024

- Programmed firmware for Winner Radio and Premium/Standard Wi-Fi controllers using C/C++ in PICmicro IDE, implementing RS485 support for
 robust serial communication between sensors and control units.
- Developed low-power embedded logic for ZigBee and LoRa radio sensors, reducing battery consumption by over 25% through sleep-mode scheduling and interrupt-based wake cycles.
- Engineered real-time leak detection logic with multi-valve response coordination, improving actuation reliability in dual-valve systems and reducing failure rates by 40%.
- Built a delay-tolerant retransmission algorithm to ensure alarm signals persist for 30 seconds, addressing synchronization issues in asynchronous wireless environments.
- Created **custom embedded communication protocols** for decentralized sensor networks, enabling secure and efficient coordination between heterogeneous IoT devices in smart home ecosystems.

Business Development Manager | Delumo - StartUp (Salzburg, Austria) | Summer Internship | Apr 2024 - Jul 2024

- Launched the English/German website; traffic up ~65%; ~18 inbound leads/month after launch.
- Held 20+ conversations with insurance partners in Europe and China; received 2 partnership interest letters and built ~C\$55K in likely deals.
- Organized 3 conferences with bronze-level sponsorships; collected 32 qualified leads at ~C\$28 per potential customer.
- Built a simple sales pipeline in the CRM; kept deal notes clean and up to date; cut time from first email to first meeting by ~5 days.
- Created sales materials (decks, one-pagers) tailored for English and German audiences.

Founder & Product Lead | Cross-Border Supply Chain (China-Russia) | Self-employed | May 2021 - Feb 2022

- Achieved C\$10K in monthly sales within three months of launch.
- Expanded the Telegram customer channel to ~350 members and deployed a support bot to streamline inquiries.
- Maintained customer response times within 24 hours.
- Directed end-to-end operations, including supplier sourcing, quality assurance, consolidation, international freight, and last-mile delivery.

PROJECTS

Multi-Modal Driver Monitoring System with ML Pipeline (Jan 2025 - Sep 2025)

- Built a real-time driver-monitoring CV system in Python (OpenCV, MediaPipe, YOLO) with multi-signal phone-use detection (face pose + brightness cues), sustaining <33 ms latency @ 30 FPS on live video.
- Architected a scalable web app (Flask + Socket.IO) with secure auth/session management and real-time video streaming to 50+ concurrent users via WebSockets; implemented rate limiting and session hardening.
- Developed an advanced ML pipeline (TDDFA 3D face recon + facial landmarks + behavioral analytics) with tunable thresholds and stats tracking, cutting false positives by 60%; productionized with Docker, structured logging, error handling, security auditing, and CI/CD for seamless deploys.

Real-time trading platform (Oct 2024 - Dec 2024)

- Built and deployed a Node.js backend with RESTful APIs (POST/GET/PUT/DELETE) on OracleDB, enabling real-time trading and portfolio management; cut query latency and boosted throughput via optimized indexing and Oracle connection pooling.
- Engineered SQL for scale (aggregations, multi-table joins, batch jobs) and automation scripts (reset.sql, init.sql) to speed test cycles and ensure data consistency across environments.
- Shipped a web frontend (HTML + JavaScript + Fetch) for secure CRUD, delivering instant trade execution and portfolio updates while integrating financial reports, market news, and performance analytics for data-driven decisions.

SKILLS

 $\textbf{Programming Languages:} \ \mathsf{Java} \ \mathsf{|}\ \mathsf{C} \ \mathsf{|}\ \mathsf{C++}\ \mathsf{|}\ \mathsf{Python} \ \mathsf{|}\ \mathsf{SQL} \ \mathsf{|}\ \mathsf{Swift}$

 $\textbf{Web Technologies:} \ React \ | \ Angular \ | \ Node. \\ js \ | \ JavaScript \ | \ TypeScript \ | \ HTML \ | \ CSS \ | \ jQuery \ | \ REST \ APIs$

Al & Databases: scikit-learn | TensorFlow | Keras | Pandas | NumPy | Matplotlib | OpenCV | RAG (Retrieval-Augmented Generation) | Agentic Al Concepts | ML Algorithms (Supervised & Unsupervised) | Data Cleaning & EDA | OracleDB | MySQL | MongoDB | Firebase | ChromaDB

Miscellaneous: Git | REST APIs | Linux | Data Structures and Algorithms | Object-Oriented Programming

 $\textbf{Product \& Management}: Product \ Management \ | \ Man$