

# Danny (Yordan) Grigorov

## Curriculum vitae

Sofia, Bulgaria

+359887220112

✉ danny.analysis@gmail.com

Languages: English, German, Bulgarian



---

## Experience

- 03.2022 – Now **Software Engineer**, *Cisco Systems*, Developing Webex, serving over 200K organizations and 18.5M Daily Active Users
- **Management:** Successfully led the migration of the local branch's metrics dashboards from Splunk to a custom solution, achieving a substantial reduction of 53.2% in telemetry costs.
  - **Teamwork:** Led a hackathon team to a top 10 finish out of 272, enhancing virtual backgrounds in meetings in a week-long project.
  - **Presentation:** Utilize effective on-and-offline presentations to de-silo knowledge for over 80 staff members, enhancing branch productivity.
  - **Communication:** Recognized for leveraging strong communication skills to coordinate with global teams across three departments, completing the project two months early.
  - **Hard skills:**
    - **C++:** Develop instrumentation for a complex codebase with 11.6M lines of C++ code and 500 git commits per week.
    - **SQL, SPL, Grafana, Kibana:** Design, visualize & maintain 62 critical quality metrics to drive data-driven decision making.
    - **DB Design:** Develop Data Rollups for telemetry clocking at 2.21 billion events/hour, pulling data from 100+ sources.
    - **Unix Shell:** Utilize perl5, grep, bash for the analysis of large log data.
- 2021, 2 Mo. **Software Engineer**, *Halo Diagnostics*
- **Java, Typescript, Docker:** Optimize Docker setup, reducing development load time by 5x, boosting team productivity.

---

## Education

- 2021 **Automatic Data Science Workflow Optimization**, *Bachelor Thesis*
- **Modular Transpiler Framework Design** Gained expertise in compiler design, program optimization, programming language implementation.
  - **Recognized Academic Potential** Encouraged by prof. Volker Markl to pursue publication of my bachelor's thesis, recognizing its academic merit in data science optimization.
- 2016–2021 **Business Informatics Bachelor**, *Technical University of Berlin*
- **Robust Computer Science Foundation** Deep understanding of core theories, crucial for project success.
  - **Mathematical Proficiency** Strong foundation in Linear Algebra, Calculus, and Statistics
  - **Database & Data Analytics Expertise** Proficient in advanced research and application.
  - **Versatile Programming Languages** including Java, Python, R, Haskell
  - **Business-IT Integration** synergize technical solutions with business strategies for optimized outcomes.

---

## Projects

- 2020, 6 Mo. **MMORPG Computer Vision Bot**, *Personal Project*
- **Advanced Bot Development** for a classic MMO using OpenCV and Python, simulating real-player interactions through screen capture and automated controls.
  - **Innovative Data Extraction:** Developed a Lua Addon to encode in-game data (e.g., health, location) as screen pixels, enabling efficient data retrieval and analysis.
  - **Precise Target Identification:** Enhanced game font to embed cues, enabling pinpoint accuracy in target detection. Further details available upon request.
- 2020, 6 Mo. **Minimax Chess AI Competition**, *Supervisor: Dr. S. Fricke*
- **AI Heuristics Optimization** for an unsolved chess variant, achieving superior performance through multi-threading techniques.
  - **AI Tournament Engine:** Engineered a robust AI testing platform for course organizers using Python and Docker to facilitate competitive AI matchups.
  - **Team player:** Earned extra credit for outstanding voluntary assistance and original contributions, fostering a fair and competitive environment while supporting both team and rival members.

---

## Professional Development Workshops

- 2022–2024 **Business Communication Track:**
- **Storytelling Workshop** *Cisco Career and Learning* Focused on enhancing communication skills for impactful business narratives.
  - **Negotiate and Influence Your Way to Success** *Monica Rodriguez, simitri-group.com* Gained advanced techniques in negotiation and influence, essential for business leadership.
  - **Data and Visualization Best Practice, with use of Tableau** *Cisco Career and Learning* Acquired best practices in data visualization and analysis, enhancing data-driven decision-making.
- 2022–2024 **Data Analytics & Programming Track:**
- **2 Day Introduction to ElasticSearch and Kibana** *Cisco Career and Learning* Gained insights into powerful search and data visualization with ElasticSearch and Kibana.
  - **Advanced C++ Programming I and II** *Cisco Career and Learning* Deepened knowledge in C++ with advanced programming concepts and techniques.
  - **Splunk Level 1 Fundamentals** *ONLC Training Centers* Developed foundational skills in using Splunk for analyzing and visualizing big data.

---

## Interests

- 2022–2024 **Gameplay Ergonomics:**
- Passionate about enhancing game control interfaces for peak comfort and efficiency. Expert in creating Autohotkey scripts and in-game macros to boost precision and immersion, ensuring smooth and intuitive control in every game project.

---

## Publications

- 2023 **Grigorov, Yordan, et al. "P2D: A Transpiler Framework for Optimizing Data Science Pipelines."**, *Proceedings of the Seventh Workshop on Data Management for End-to-End Machine Learning. 202, (DEEM@SIGMOD)*
- **Achieved speedup of up to 263x** by automating optimizing hardware utilization and network load reduction, maximizing data pipeline efficiency
  - **Innovative Extensible Framework:** Created a flexible Intermediate Representation (IR) for efficient n\*m translation between input & output languages, covering diverse data operations.
  - **Enhanced Accessibility in High-Volume Data Analysis:** Pioneered methods to streamline large dataset analysis, enhancing skill adaptability and data accessibility among data scientists.