

Kristof Spellen

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EDUCATION

Massachusetts Institute of Technology (MIT)

Candidate for a B.S. in Artificial Intelligence and Decision Making | GPA: 5.0/5.0

exp. May 2028 | Cambridge, MA

- **Relevant coursework:** Introduction to Machine Learning, Introduction to Autonomy, Mobile Autonomous Systems Laboratory, Linear Algebra, Discrete Mathematics, Multivariable Calculus

Iona Preparatory School | SAT: 1530

September 2020 – May 2024 | New Rochelle, NY

- **Valedictorian:** GPA: 100.84/100.00

- **Honors and Awards:** The Harvard Book Award, National Merit Scholarship Commended Student, AP Scholar with Honors and AP Scholar with Distinction, National Honor Society, National Mandarin and English Honor Societies

RESEARCH & EMPLOYMENT

MIT Mission Innovation X

September 2025 - Present | Cambridge, MA

Computer Vision Researcher

- Aggregate and preprocess multi-modal datasets (CCTV footage, camera traps, wildlife camera feeds) to support development of computer vision models adaptable to dense urban environments and low-visibility arctic conditions
- Conduct systematic literature review of one-stage vs transformer-based detectors
- Presenting findings weekly to both large cross-disciplinary cohort and small technical subgroup
- Directly inform model architecture selection and evaluation metrics by bridging research insights with team strategy

BigBear.ai - Vision Team

July 2025 - Present | Remote

Data Annotator

- Annotate complex X-ray security scans to build quality training datasets for the Pangiam Threat Detection solution, a computer vision system that uses AI models to identify weapons, explosives, and contraband in baggage and cargo
- Contribute directly to model training by ensuring consistent, precise annotations (>98% accuracy) across thousands of scans, improving downstream detection performance in a high-stakes aviation security context
- Support vision engineers in refining annotation protocols, strengthening dataset robustness and accelerating deployment of threat-detection models used to safeguard airports worldwide

Aegis Mobile - Data Intelligence Solutions Team

May 2023 – August 2024 | Remote

Intern

- Conducted large-scale device pricing analysis by cleaning, structuring, and interpreting over 30,000 data points
- Utilized Excel pivot tables, and custom dashboards to identify anomalies in pricing and market segmentation

Latvian Ev. Luth. Church of NY

September 2023 – May 2024 | Westfield, NJ

Assistant Teacher

- Taught Latvian reading, writing and grammar (5th grade), folk dance, geography and theology
- Supported church services and functions (technical support) for Sunday services and community events
- Participated in volunteer weekends to maintain and upgrade church properties

EXTRACURRICULAR

MIT Varsity Volleyball

2024 – Present | Cambridge, MA

- Lead team offense by calling plays, requiring clear communication, fast decision-making, and tactical awareness
- Manage rigorous MIT course load with 20+ hours of volleyball practices and competitive competitions a week

Sigma Chi Fraternity

2024 – Present | Cambridge, MA

Assistant Recruitment Chairman and Social Chairman

- Led recruitment strategy, coordinating outreach, events, and interviews to attract and integrate new members
- Organize weekly social events with 100+ attendees, managing logistics, a \$9,000 budget, and risk compliance

Iona Preparatory School Leadership Committee

2021 - 2024 | New Rochelle, NY

Co-President

- Facilitated weekly small group discussions with first year peer groups of 15 students
- Organized and operated school wide events such as orientations, religious services and leadership workshops

Iona Preparatory School Mandarin Club

2022 – 2024 | New Rochelle, NY

Co-President

- Shared enthusiasm for, and knowledge of, Chinese culture and language
- Grew club membership by 50+ students
- Facilitated a group of 6-12 students to perform cultural “Dragon Dance” at annual school “Heritage Day”

SKILLS AND INTERESTS

- **Interests:** Latvian Cultural Song and Folk Dance, Club Golf, Intramural Basketball, Poker
- **Skills:** Latvian, Mandarin, Python, PyTorch, NumPy, Excel, Data Analysis, Literature Review, Presentations, Lifeguarding