Kyle Williams

Nationality: American | **Gender:** Male | **Email address:**

kyle.anthony.williams2@gmail.com | **Email address:** kawcco@mit.edu | **Website:**

https://kawcco.com

WORK EXPERIENCE

5 FEB 2024 – CURRENT Cambridge, MA, United States
NUCLEAR RESEARCHER, COMPUTER VISION SCIENTIST MASSACHUSETTS INSTITUTE OF TECHNOLOGY

- member of second cohort of Fusion Undergraduate Scholars program
- "Find the Precipatates:" aiming to signfiicantly speed up materials research for reactor parts with computer vision automation written in MATLAB

Business or Sector Professional, scientific and technical activities |

Department MIT Plasma Science and Fusion Center | **Email** info@psfc.mit.edu |

Website https://www.psfc.mit.edu/fusars

25 SEP 2023 – 14 DEC 2023 Cambridge, MA, United States
CLIMATE ENGINEERING RESEARCHER, DATA SCIENTIST MASSACHUSETTS INSTITUTE OF TECHNOLOGY

- led re-write of interactive EN-ROADS-inspired dashboard for understanding the climate effects of MIT's HVAC systems
- implemented systems for robustly enforcing code readability, portability
- created and moderated Slack server to mediate communication between team members
- helped to onboard new members
- learned Dash, Plotly libraries

Business or Sector Information and communication | **Department** MIT D-Lab | **Website** https://d-lab.mit.edu/

8 JAN 2024 – 26 JAN 2024 Cambridge, MA, United States
COMPARATIVE MEDIA RESEARCHER, FILM PRODUCER MASSACHUSETTS INSTITUTE OF TECHNOLOGY

- assisted with various technical components of "retroduction" short film
- implemented Game of Life in Excel 7 using Visual Basic for Applications
- wrote scripts to download thousands of wallpapers for intro sequence
- culminated in an in-progress technical report on Excel work
- scouted and referred new team members

Business or Sector Arts, entertainment and recreation | **Department** Trope Tank | **Website** https://tropetank.com/

31 AUG 2023 – 14 DEC 2023 Cambridge, MA, United States
EDUCATIONAL WRITER MASSACHUSETTS INSTITUTE OF TECHNOLOGY

- wrote, edited large parts of MIT online electronics/creative computation seminar
- designed parts of course
- created code, video, diagrams
- asynchronously communicated with manager Cambridge

Business or Sector Information and communication | **Department** MIT Admissioms |

Website https://mitadmissions.org/

4 JUN 2023 – 17 AUG 2023 Marlborough, Massachusetts, United States
ASSISTANT TO HEAD OF ENGINEERING STREAMFORGE

- Return offer from previous year's internship
- Worked on implementing numerous exploratory AI products for clients to gain better insight on advertising effectiveness
- Reverse-engineered TikTok API to implement new collection of microservices
- Worked with various AI/database tools
    - OpenAI Embeddings
    - Anthropic Claude
    - Supabase
    - pgvector
    - Weaviate

19 JUN 2022 – 25 AUG 2022 Marlborough, Massachusetts, United States
ASSISTANT TO HEAD OF ENGINEERING STREAMFORGE

- Reverse-engineered hidden web APIs to write, and maintain numerous Node.js microservices
    - Steamworks
    - YouTube
    - Twitch
    - Protocol Buffers
- Worked on two Vue.js frontends
- Interacted with MongoDB, RabbitMQ
- Designed future data aggregation and notification systems

Business or Sector Information and communication ⏐ **Department** Engineering & Product ⏐

Website https://streamforge.com/

20 JUN 2021 – 3 AUG 2021 Brooklyn, United States
ASSISTANT TO CHIEF OF STAFF NEW YORK SENATOR JABARI BRISPORT

- Attended and took notes at numerous meetings
- Helped to find possible locations for outreach event, automate bill research using technology and programming; was later commissioned to create a web interface for bill research script in June 2022
- Filled out numerous spreadsheets with Google Sheets, Airtable
- Created a healthy relationship with NYS Senate Developer Team

Address 906 Broadway, 2nd Floor, Brooklyn, NY, 11206, Brooklyn, United States ⏐ **Email** brisport@nysenate.gov ⏐

Website https://www.nysenate.gov/senators/jabari-brisport

EDUCATION AND TRAINING

SEP 2023 – CURRENT Cambridge, Massachusetts, United States
BACHELOR'S DEGREE CANIDATE (SEPTEMBER 2023 - JUNE 2027) Massachusetts Institute of Technology

Website https://mit.edu ⏐ **Field of study** Information and Communication Technologies

LANGUAGE SKILLS

Mother tongue(s):   **ENGLISH**

DIGITAL SKILLS

Computer programming (advanced)

Python ⏐ HTML ⏐ Bash ⏐ TypeScript ⏐ Svelte ⏐ JavaScript ⏐ SQL ⏐ Java

Computer programming (intermediate)

CSS ⏐ Rust ⏐ C ⏐ Go

Database technologies

SQLite | Dolt | MongoDB | PostgreSQL

Computer programming (beginner)

Wolfram Language + Wolfram Mathematica

System administraiton

Linux | Docker | Git | systemd

Areas of study

Computational linguistics: syntax, grammar, semantics | Programming languages | Type systems | Compilers | Interpreters | Graph theory | Set theory | Databases | User experience | Data science | Computational music theory | Comparative media | Climate action | Nuclear science | Computer vision