Wrapping it up

DAY TWO - CLOSING

Reflections

DAY 1

"Why teach ALife?"

Align on shared goals and learning outcomes for ALife education. Small group discussions surface the challenges and opportunities ALife presents as a teaching domain. Features curated presentations and lightning talks showcasing ALife education success stories.

DAY 2

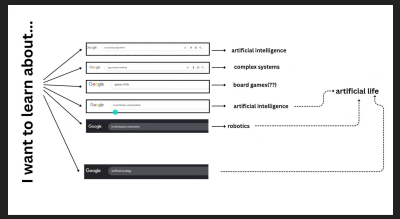
"How to teach ALife?"

Building on Day 1 goals, shift to practical strategies. Small group feedback exchanges let you workshop your own ideas and teaching artifacts with peers. Experienced educators lead introductory tutorials on effective pedagogical practices.

CLASSICAL

WHAT DO YOU DO/TEACH THAT IS "ARTIFICIAL LIFE"?

WHAT'S MISSING?



"i looked into it briefly but didn't understand the point of it"

"sounds like science fiction 😉 "

"I think it's a subfield of AI [...] a set of optimisation techniques"

"is this a new area?"

"AI with some consciousness"

RECENT DISCUSSIONS WITH COLLEAGUES AND STUDENTS

"it is about genetic algorithms"

"we played with cellular automata [in module X]"

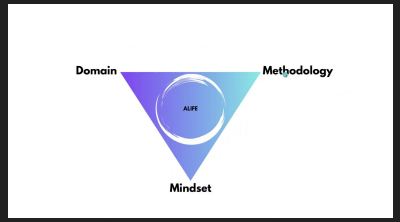
"...algorithms we can use for video games"

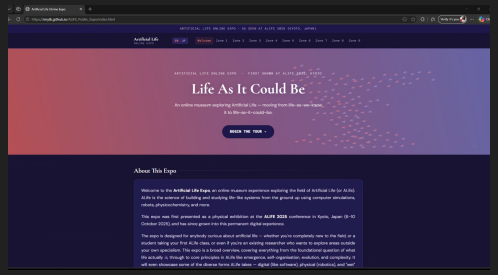
"i came across it [...] i work in computational biology [...] "

"...like swarm intelligence"

"i looked it years ago [...] liked the focus on emergence"

"i can't see how CS can create life"





Soup of Life

Soup of Life – Watch Life Emerge in Real Time

A continuously running artificial life simulation where simple organisms emerge, evolve, and sometimes go extinct. No goals, just observation.

ALIFE-Ed

ALife a Melange of Viewpoints, Methods, and Theory

ALIFE

- Recent discussions about an identity crisis: is ALife a field or something else?
  - *e.g.* (Beer, 2024) ~ ALife should consolidate commonalities as a mature discipline.
  - and (Harvey, 2024) ~ ALife more of a nursery ecology for novel interdisciplinary research ideas and collaboration.

ALife-Ed

https://github.com/rivesunder/PQENs

Libraries, Stack, Robots, and Tools

Evolutionary Algorithms:
DEAP

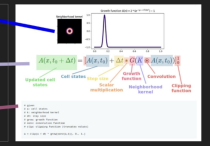
Neural Networks:
PyTorch

Body and Environment Simulations:
Gymnasium
Mujoco

Robotic Hardware:
Hand-built wheeled robot, a robotic arm, and legged walker

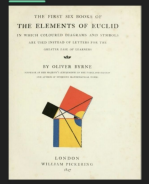
Carve a Rosetta Stone 1/2

- Graphical overview
- Equation
- Code



Slide from (Davis 2024)

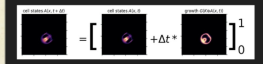
ALife-Ed



Oliver Byrne 1847, CC0: archived

ALife-Ed

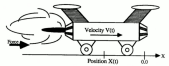
Empowerment by Visualisation (1/3)

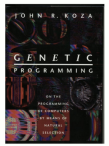


From (Davis 2024)

Optimal Control

Cart Centering (isotropic rocket) Problem





J. R. Koza, Genetic Programming: On the Programming of Computers by Means of Natural Selection. Cambridge, MA. MIT Press, 1992

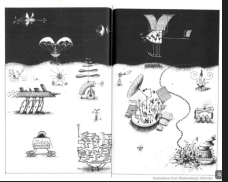
Evolutionary Robotics

(Robot Learning, NeuroRobotics, Embodied AI)

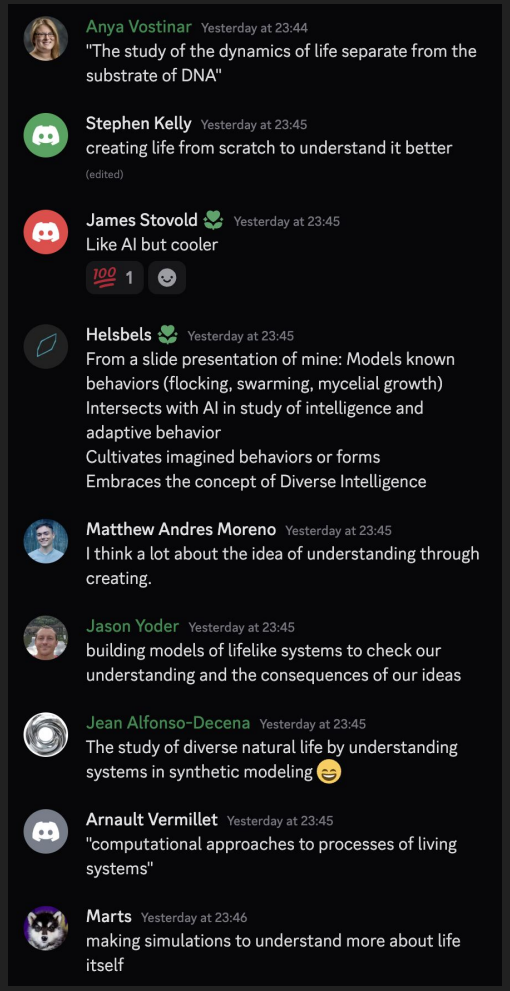
Explore the *automated design of autonomous robots*, integrating topics in Artificial Intelligence, Robotics, and Cognitive Science.

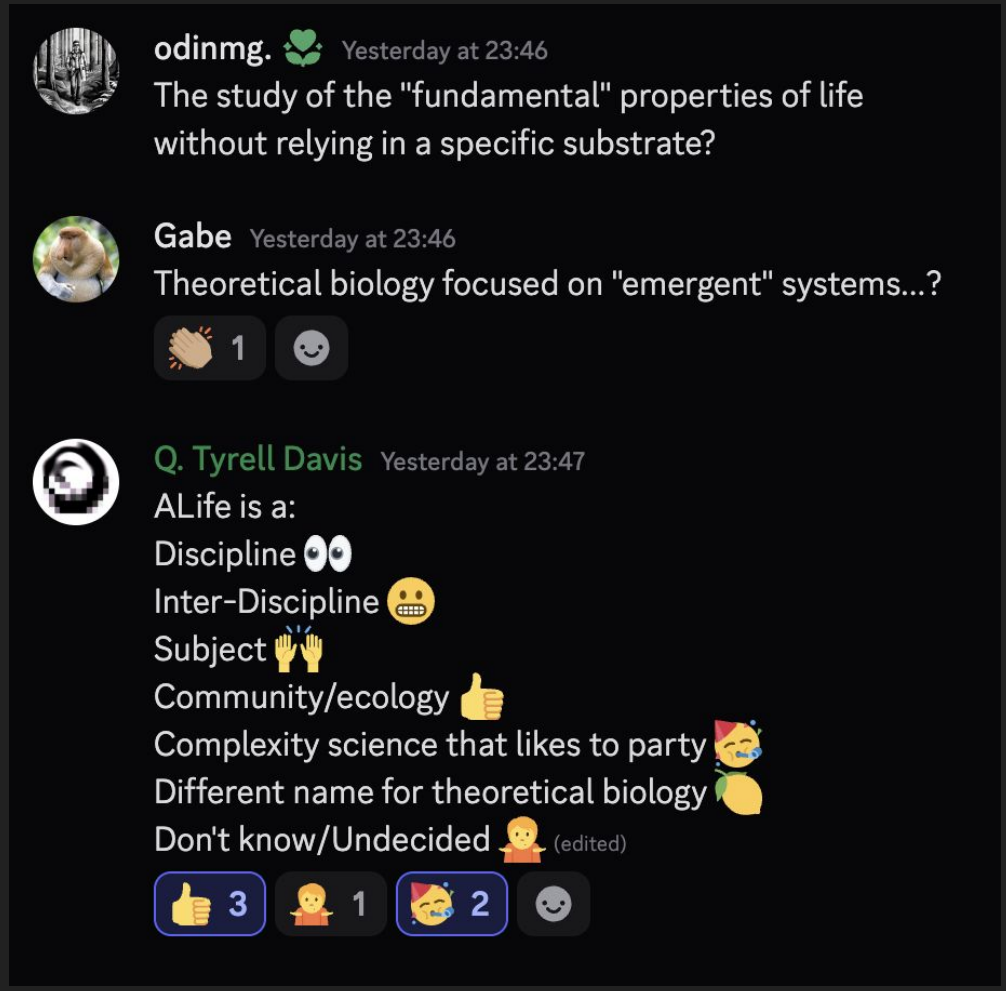
Topics such as the design of robot morphologies, neural controllers, evolutionary computation, autonomous embodied agents, physical simulations, and computer-designed organisms.

Open to students in ALL engineering majors with some programming experience.

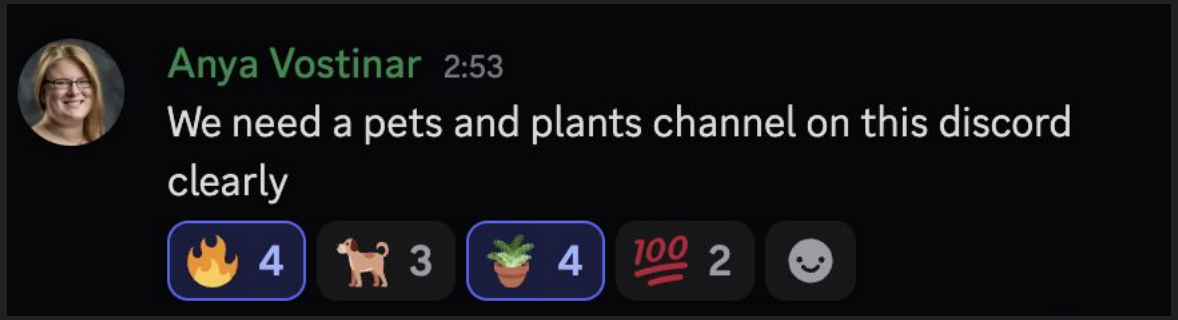


ALife-Edu


Anya Vostinar Yesterday at 23:44
"The study of the dynamics of life separate from the substrate of DNA"
Stephen Kelly Yesterday at 23:45
creating life from scratch to understand it better
(edited)
James Stovold Yesterday at 23:45
Like AI but cooler
100 1
Helsbels Yesterday at 23:45
From a slide presentation of mine: Models known behaviors (flocking, swarming, mycelial growth)
Intersects with AI in study of intelligence and adaptive behavior
Cultivates imagined behaviors or forms
Embraces the concept of Diverse Intelligence
Matthew Andres Moreno Yesterday at 23:45
I think a lot about the idea of understanding through creating.
Jason Yoder Yesterday at 23:45
building models of lifelike systems to check our understanding and the consequences of our ideas
Jean Alfonso-Decena Yesterday at 23:45
The study of diverse natural life by understanding systems in synthetic modeling
Arnault Vermillet Yesterday at 23:45
"computational approaches to processes of living systems"
Marts Yesterday at 23:46
making simulations to understand more about life itself


odinmg. Yesterday at 23:46
The study of the "fundamental" properties of life without relying in a specific substrate?
Gabe Yesterday at 23:46
Theoretical biology focused on "emergent" systems...?
1
Q. Tyrell Davis Yesterday at 23:47
ALife is a:
Discipline
Inter-Discipline
Subject
Community/ecology
Complexity science that likes to party
Different name for theoretical biology
Don't know/Undecided
(edited)
3
1
2

ALife-Edu


Anya Vostinar 2:53
We need a pets and plants channel on this discord clearly
4
3
4
100
2

Post-workshop Summaries: Socials and Substack

Group Photo in a minute!

Optional - welcome to turn off your camera, but would love to have you in it!

Stay in-the-loop!

Discord Server: ALife Education

We hope to use this Discord server moving forward.

If you are interested in staying involved with the ALife education, please reach out to the organizers with your ideas and directions you'd like to pursue.

We are a globally-distributed group, which creates a truly unique opportunity as we work unite our pedagogical practices and network across educators.

NEXT WEEK:

Monday May 25, 10am - 2pm Japan

Single Day Event
with special Invited Talks
(recorded)

New Speakers:
Bert Chan
Takashi Ikegami
Keisuke Suzuki

ALife-Edu

AEDU

ALife Education Workshop 2026

AEdu-East: Japan/Asia Line-Up


BERT CHAN
Artificial Life Institute


TAKASHI IKEGAMI
Atomi Information Science and Arts Center


KEISUKE SUZUKI
Hokkaido University


Q. TYRELL DAVIS
Independent Researcher


JEAN ALFONSO-DECENA
In Silence AI

Talk by **Bert Chan**, Artificial Life Institute
Talk by **Takashi Ikegami**, Atomi Information Science and Arts Center
Talk by **Keisuke Suzuki**, Hokkaido University
ALife Education presentation by **Q. Tyrell Davis**
Facilitated and hosted by **Jean Alfonso-Decena**

Panel discussion: **"Art, Beauty, and (Inter)Disciplinarity in ALife"**
Group open discussion

Thank you all for participating!

Please provide feedback so we can build on strengths and address weaknesses
https://forms.gle/TzRZ6jDBiHVTYfqz8

Open Dialogue encouraged on the #feedback-ideas-improvements channel.

ROSE-HULMAN INSTITUTE OF TECHNOLOGY | in silence ai. | CROSSLABS | UNIVERSITY OF WARWICK | Carleton

AEDU: Artificial Life Education
Virtual Workshop

AEdu-West North America | May 18 & 19, 2026 | 10:00 AM - 2:00 PM ET
AEdu-East Japan & Asia | May 25, 2026 | 10:00 AM - 2:00 PM JST

ALife-Edu

We bid you ~~AEDU~~ adieu!

(For now :D)