Algoritmi Projects

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About Algoritmi

- Algoritmi is UiT based student club for programming.
- We meet every Thursday in room E1600 at 5pm.
- Algoritmi is a part of Narvik Student Society.

E-mail: algoritmi@samfunnet.no

Facebook: facebook.com/AlgoritmiNarvik

Discord: discord.gg/Q9etjvZ59f

LinkedIn: linkedin.com/company/AlgoritmiNarvik

Organisation number: Brønnøysundregistrene

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Why?

Build Your Portfolio & Network

- Empowering Women in Engineering: We encourage female students to bring the ideas and encourage their participation in engineering and AI projects.
- Portfolio Development: Each project you join becomes part of your professional portfolio, showcasing your skills to future employers.
- Networking Opportunities: Connect with peers and professionals to open doors for internships and collaborations.
- Real-World Experience: Gain hands-on experience with industry tools, giving you an edge in the job market (otherwise AI takes your job).

Narvik Studentersamfunn

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How to Start a Project

Starting a project at Algoritmi is simple and straightforward

1. Find a Team or Start One:

- Join a Team: If you have a specific interest, connect with others who share it during our Thursday meetings.
- Start Your Own: Don't see a project that excites you? Propose a new one and gather a team.

2. Choose a Project and Propose: https://github.com/AlgoritmiNarvik/How-to-Start-a-Project-and-Project-Ideas

- Browse Ideas: Check our GitHub repositories for ongoing projects and ideas.
- Propose a New Idea: Whether it's AI, software development, or something else, your ideas are welcome.

3. Plan and Budget: Outline what you want to achieve –> Create a Budget: Estimate the resources you'll need– time, software, hardware, etc. –> If necessary, apply for small grants or sponsorships through the club.

4. Weekly Meetings: Join Us Every Thursday 17:00 and Use our weekly meetings to discuss progress, share challenges, and get feedback.

5. Documentation and Sharing is important and Prepare for Challenges: Expect the Unexpected and Don't hesitate to ask for advice or assistance from other members.

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Links & Contacts:
Algoritmi GitHub Algoritmi LinkedIn
algoritmi@samfunnet.no

Current open projects

Here are some of the projects we are currently developing, available for public access on our GitHub

- SaMuGeD - Algoritmi DrDreSamplerAI 2024

This project focuses on the development of AI-driven music sampling techniques, aimed at exploring new methods of sound generation and processing using advanced machine learning algorithms.

- Norwegian Culture-Focused LLM Benchmark and Model Development

This project is dedicated to creating a benchmark for large language models tailored to Norwegian culture, with the goal of improving AI's ability to understand and generate culturally relevant content.

- AI-Powered Musical Madness

This initiative explores the intersection of artificial intelligence and music creation, focusing on developing new approaches to AI-generated music with an emphasis on creativity and innovation.

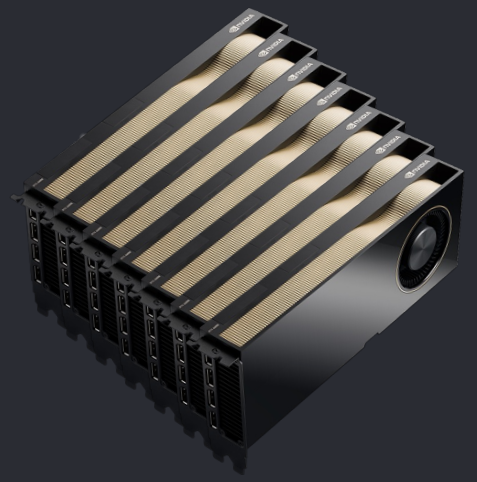
Algoritmi Narvik GitHub

Project Ideas, Project Pool

Joining/Starting a project at Algoritmi is simple and straightforward

1. Check this https://github.com/AlgoritmiNarvik/How-to-Start-a-Project-and-Project-Ideas

2. Text your own thoughts and ideas here algoritmi@samfunnet.no



Links & Contacts:

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Algoritmi GitHub

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Thank you!

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Additional slides

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Computer Vision Projects using SAM, Gr DINO, YOLO

These models can seem intimidating, but their applications are vast and impactful:

- Healthcare: Projects like AI-assisted MRI interpretation help doctors quickly identify anomalies, making diagnostics faster and more accurate.
- Security & Surveillance: Big Brother 2.0 Facial recognition systems in public spaces are being developed to enhance security, though they sometimes spark debates about privacy.
- Industry & Manufacturing: Spot the Difference, Vision-based quality control projects detect product defects on manufacturing lines, ensuring only top-quality items reach consumers.
- Etc.

Computer Vision use case (1984 vibes)

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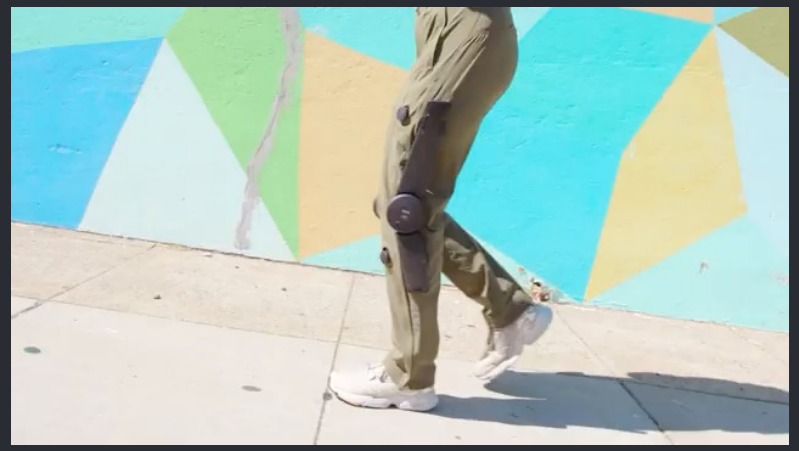
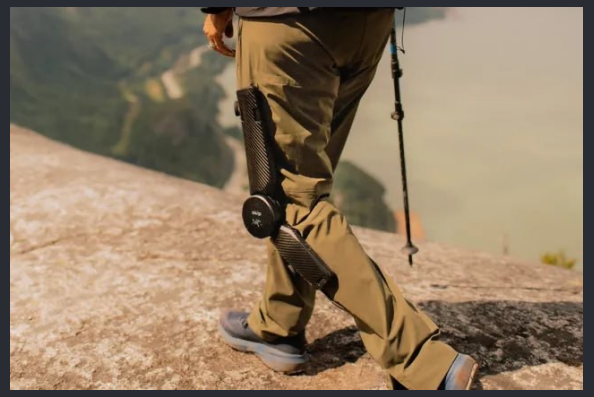
Build something like this in house?





https://www.theverge.com/2024/7/29/24208615/arcteryx-skip-google-x-labs-mogo-hiking-exoskeleton

Why for Business:
talents++, collaborations++, visibility ++, respect++, karma++

Why for Algoritmi:
education++, experience++, community++

Infrastructure 2: Mobile ALOHA

Learning Bimanual Mobile Manipulation with Low-Cost Whole-Body Teleoperation

Total cost approx. $31,757.86 Tutorial Paper ML Code Hardware Code

Why for Algoritmi:

- Long-term infrastructure: sandbox for **Robotics**, LLMs, Computer Vision all together
- education++, experience++, community++, possible cooperation with Stanford?

Why for Accenture:

- Infrastructure Sponsor: every LinkedIn post about this project branded that it was made on the infrastructure provided by Accenture. Every video with robots in 2024 gets like the ones with cats?
- Talents: Accenture will be associated as a sexy and innovative company among students at campus
- UiT and Accenture collaborations based on hardware
- visibility ++, collaborations++, respect++, karma++

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Algoritmi AI SafeSpace [Open TechLab]

Enabling innovation with Algoritmi AI SafeSpace:

- Marrying AI Theory and practice
- Hands-on learning for Advanced AI Applications
- From classroom to real-world impact
- Fostering a Playground for AI innovation
- Infrastructure for Tomorrow's AI Talent

Algoritmi AI SafeSpace: Vision

Open TechLab => Community => AI Cluster &

(Sandbox/Playlab) of Enthusiasts Business platform

^ ^ ^

| 2024 | 2024 - ... | 2026 - ...

Exploration & **Algoritmi** growth & Entrepreneurship, MSc/BSc thesis

Innovation Learning, forming a team + Sykepleie, Økonomi, etc.

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