Austin David Yarger

2260 Hayward St, Ann Arbor, MI 48109 ~ 3611 Beyster

(248) 766 - 6098 ~ <u>ayarger@umich.edu</u> ~ <u>ayarger.com</u>

Education



MSE in Computer Science and Engineering

April 2018

University of Michigan, Ann Arbor

BSE in Computer Science, Magna Cum Laude

May 2015

University of Michigan, Ann Arbor

Teaching LEO Lecturer II (University of Michigan, Ann Arbor)

EECS 298: 3D Technical Art and Animation

Aug 2025 - Present

- Syllabus: bit.ly/umich_3d / Course Website: eecs298.com
- Designed and executed content for a new multidisciplinary course on the topics of 3D Art and Animation Production (Blender, geometry, topology, armatures, materials, etc) and game engine integration (dynamic hair and cloth simulation, particle systems, animation logic / layers, etc).

EECS 498.007 : Game Engine Architecture (ULCS)

Jan 2024 - Present

- Syllabus : <u>bit.ly/game_engines</u> / Course Website : <u>eecs498.com</u>
- Designed and executed content for a new Upper-Level CS course on the topics of low-level game engine technologies (SDL, Box2D, Lua, etc) and techniques (Embedded Scripting Languages, Composition, Data-Oriented Programming, Multiplatform / Portable Source Code, Collision Detection, etc).
- Designed and implemented a novel multimedia autograder (<u>bit.ly/gea_auto</u>) capable of driving student game engines with diverse input (scripts, scene files, images, audio – test cases are games the engines "bring to life") and evaluating their output (image frames, audio, text), rendering feedback in minutes.

EECS 440 : Extended Reality for Social Impact (Capstone / MDE)

Sep 2022 - Present

- Syllabus : <u>bit.ly/umich_xr</u> / Course Website : <u>eecs440.com</u>
- Designed and executed content for a new capstone course on the topics of virtual reality, augmented reality, game engines (Unreal + Unity), project management, business, artistic expression, design patterns (interaction-affordance architecture), and social impact.
- Acquired faculty approval for permanence in the Fall of 2023 (EECS 498.003 -> EECS 440)

EECS 494: Computer Game Design and Development (Capstone / MDE)

Sep 2017 - Present

Syllabus : <u>bit.ly/eecs_494_syllabus</u> / Course Website : <u>eecs494.com</u>

- Designed and executed content on modern game technologies and techniques, design patterns, game design principles, production / project management processes, business, artistic expression, and more.
- Marketed, planned and executed multi-university student game exhibitions with 250+ attendees (in-person) and 1K+ attendees (virtual pandemic) Showcase media here (https://bit.ly/494_media).
- Final student project earned 5-figure publishing deal : bit.ly/yolked_publishing_deal
- Produced marketing material on university game development scene: <u>bit.ly/umich_gamedev</u>

ENGR 255, 355, 455: WolverineSoft Studio Project Team MDP

Sep 2019 - Present

- Syllabus: bit.ly/wsoft_studio_mdp / Website: bit.ly/wsoft_studio / Press: bit.ly/wsoft_studio_article
- Advised, verified, and graded progress on student-led commercial game production studio.
- Occasional production-related lectures and consulting sessions.

UARTS X60 : Web-First Game Engine Research Project Team (FEAST program) Jan 2022 - Present

- Syllabus: bit.ly/timberengine / FEAST Program: bit.ly/umich_feast
- Led an undergraduate / graduate research team developing an accessible, web-first engine for game design education in the Realtime Strategy (RTS), Roleplaying Game (RPG), and Tower Defense genres.

UARTS 175: Collaborative Creative Projects

Jan 2022 - Apr 2023

- Syllabus : bit.ly/uarts_175
- Designed and executed content for a new course on the topics of creative process and multidisciplinary collaboration.

UARTS 150: Introduction to the Creative Process

Sep 2019 - Dec 2022

- Syllabus : bit.ly/uarts_150_syllabus
- Contributed engineering lectures and course-planning to multidisciplinary, 5-instructor course.
- Implemented end-of-semester showcase website for pandemic semesters (showcase150.com).

EECS 499.210: Game Development Directed Research

Jan 2018 - Dec 2023

- Syllabus / Student Projects : <u>bit.ly/499_syllabus</u>
- Directed 30+ undergraduate student research projects with an emphasis on stakeholders, impact, exhibition, weekly online public disclosure (research / development blogs), and final exhibition of research findings.

Internal Service

Sponsored Student Organization Advisor

Jan 2020 - Present

- Graduated from VSO in 2020: Wolverine Soft Student Game Development Club
- Learn More : https://wolverinesoft.org

CSE Student Game Project Exhibitions

• Ann Arbor Symphony Orchestra - Video Games Live (article)

Nov 2023

CSE Family Day

Apr 2023

Ann Arbor Open Middle School

Mar 2023

CS-LSA Advising Sep 2018 - Mar 2021

• Advised students on courses, jobs, grad school, and program progress (break in F21 for external work)

First-Year Student University Mentorship Program

Aug 2017 - Aug 2018

- Mentored first-year students adjusting to campus life and undergraduate education.
- Worked under the Center for Student Success (Ayeza Siddigi)

Grants / Awards

Jon R. and Beverly S. Holt Award for Excellence in Teaching (College of Engineering)

Jan 2025

- Press : <u>bit.ly/award_press</u>
- One of two College of Engineering faculty members to receive the award in 2025.
- Nominated by the Honors and Awards Committee of the Computer Science department.
- Emphasis on course development during 2022-2024 (EECS 440, EECS 498.007, UARTS 175)

Course Development Grants

•	CSE Fall Course Development Grant (EECS 498.007 : Game Engine Arch.)	Oct 2023
•	CSE Summer Course Development Grant (EECS 498.007 : Game Engine Arch.)	May 2023
•	CSE Summer Course Development Grant (EECS 440 : XR for Social Impact)	Apr 2022
•	Daniel F. Kortemeyer Memorial Fund for Game Development	Nov 2021

LEO Lecturers Professional Development Fund Grant

•	Game Developers Conference 2022 : bit.ly/pdfll_2022_success	Nov 2022
•	Game Developers Conference 2019 : bit.ly/pdfll_2019_success	Nov 2019

Federal Fish and Wildlife Small Media Grant

Aug 2019

Grant announcement : <u>bit.ly/usfws_grant</u> (Ravenswood Media) / Article : <u>bit.ly/wns_grant_article</u>

Michigan Road Scholars Tour

Mar 2019

- Traveled to diverse locations throughout the state to better connect with and understand the local communities from which our in-state students hail.
- Learn More : <u>bit.ly/road_scholars</u>

EECS Outstanding Service Award

Feb 2015

Awarded for growth and impact with the Wolverine Soft game dev student org (wolverinesoft.org)

Conference Presentations

Indie Survival Guide: Sustainability Techniques for Small Midwestern Studios

Presented at Toronto XP - https://xpgamesummit.com/
 Presented at LTUX - https://ltux.games/
 Apr 2023

 Presented at Penguicon - https://2023.penguicon.org/ Presented at M+DEV - https://www.mdevconf.com/ 	Apr 2023 Nov 2022		
Introduction to Digital Game Modding and Ethical Hacking			
Recording : https://youtu.be/tfiwnsJJTDI?t=62			
 Presented at GDEX - https://www.thegdex.com/ 	Oct 2021		
 Presented at GLGX - https://glgx.dev/ 	Feb 2021		
 Presented at Penguicon - https://2021.penguicon.org/ 	Apr 2020		
 Presented at M+DEV - https://www.mdevconf.com/ 	Feb 2020		
Compa for Outrooch : White Neas Syndrome and the Pusiness Model of Outrooch Compa			

Games for Outreach: White-Nose Syndrome and the Business Model of Outreach Games

Presented at North American Society for Bat Research <u>www.nasbr.org</u>

Oct 2019

Professional Service

Co-Founder and Co-Chair

Feb 2017 - Present

International Game Developers Association, Ann Arbor Chapter

- 1100+ registered members
- Organized monthly lectures from industry professionals (Sony, Microsoft, Unity, etc) and academics in addition to community exhibitions, networking events, and government support (Ann Arbor SPARK).
- Learn more : https://igda2.org

Instructor (Game Development Track)

July 2018 - Present

TechX / XAcademy Shanghai

- Designed and executed content for a game development summer camp in Shanghai, China.
- Learn more : https://info.xacademy.cc/en/

Founder and Maintainer

Feb 2021 - Present

MichiganGameStudios.com Database

- Established database to track, organize, and promote research of game / interactive technology companies in the state of Michigan.
- Lobbied for multi-university support, achieving #1 search rank for "Michigan Game Companies".
- Learn More: https://MichiganGameStudios.com / Press: https://bit.ly/mi_studio_database_press

President

Jan 2017 - Present

Arbor Interactive

- Developed educational experiences for Federal Fish and Wildlife (small grants), healthcare companies, and media brands.
- Developed social-media data visualization tools for clients in academia.
- Learn More: https://arborinteractive.com

VR / AR / Game Development Consultant

Nov 2019

Ann Arbor SPARK

Established XR Internship Fund / Program: https://bit.ly/spark_xr_program

- Generated research / due diligence on local XR startup funding candidates.
- Learn More : https://annarborusa.org/

References

Jeremy Gibson Bond, Professor of Practice Michigan State University gameprof@msu.edu ~ (512) 659 - 8624

Corbin Reeves, Lecturer
Eastern Michigan University
creeve13@emich.edu ~ (734) 233 - 7489

Margarita Hernandez, PhD, Chief Ecosystem Officer 4M margarita@experience4m.com ~ (512) 466 - 9905

Natalie Fang, Lecturer University of Michigan, School of Information <u>nfang@umich.edu</u> ~ (614) 286 - 5838