# Foothill Instructional Initiatives in AI

## Curricular

#### New Courses, Certificates and Degrees

- Ethics in AI class (HUMN 15), Intro to AI (CS 11A), Intro to Machine Learning (CS 12A), gone through curriculum and articulation Starting Fall '25
  - o Ethics in AI- Cal-GETC, Humanities
  - Need to plan for demand for Fa 25
  - UC transfer articulated approved
- Other new courses are Natural Language Processing (CS 11B) and Deep Learning (CS 12B). These courses are the second in the according sequence and will start to be offered in winter '26.
- Several AI Certificates are in the curriculum process
  - COA: Effective 25-26: Principles of Machine Learning and Artificial Intelligence
  - o COA: Effective 25-26: Artificial Intelligence Empowered Instruction
  - COA: Under Development: Advanced Machine Learning and Artificial Intelligence
  - o AS Degree: Under Development: Artificial Intelligence
- Eric Reed working on possible AI bachelor's degree or pathway to UCs that have AI Bachelor's degree. At minimum, create pathways towards a certificate/AS degree. Have current fellows through funding in SVLG in collaboration to create such pathways. Currently in talks with many industry connections to help shape the curriculum.
  - The fellows from SVLG wrapped up their work with us and helped to shape the curriculum we developed for the STEM AI classes listed above. A white paper was produced out of this and can be found at the following link:
    - I-CAP White Paper. SVLGF (1).pdf
- Semiconductor apprenticeship—partnering around hardware providers
  - AI hardware bubble has created manufacturing job in SI Valley againparticularly with equipment manufacturers
  - Expanding apprenticeship with stackable certificates
- KCI/LINC- two courses related to AI in education to start Spring/Summer '25, larger certificate program/more courses in development with intention to start Summer or Fall '26

### Modules/ Class resources

- Developing information literacy modules with library, building into curriculum (Respiratory Therapy Bachelor's program is exploring this for their capstone project)
- Library resources available to campus
  - o <a href="https://libguides.fhda.edu/genAlLiteracy">https://libguides.fhda.edu/genAlLiteracy</a>
  - o <a href="https://libguides.fhda.edu/ChatGPT">https://libguides.fhda.edu/ChatGPT</a>

# Examples of Modifications to Existing Courses and AI projects in Existing Courses

- Business advisory board- talking about creating a new class versus integrating AI tools into our classes; leaning towards creating a new class
- Ben- two surveys on student AI usage as a class project
- Current Al Survey in support for NSF Grant proposal (BRAIN Building On-Ramps for Al Navigation):
  - https://docs.google.com/forms/d/e/1FAIpQLSdRZ0olvsgjfGB3vi1nQYXj4qn9\_aja1q \_WLVTccM7dKM5tnQ/viewform
- Evolving Dual enrollment curriculum around AI with SVLG + SVEF
- Hilary Gomes introduced an AI project in her oil painting class where students crafted text prompts for AI image generators and then painted the resulting images.
- MTEC classes use software that is powered by machine learning like RX, the industry trailblazer for audio repair and enhancement.

## Co-Curricular

- ETI AI Learning Community
  - o Bi-weekly meetings in fall, winter, and spring quarters
    - Participants include staff, administrators, faculty, students, community members, and employees from other colleges and universities. Disciplines range across all divisions and departments.
    - Topics of discussion have a wide range depending on the agenda from week to week and anyone can add to the agenda. Examples of topics include ethical usage, academic integrity, technological advancements, updates in the news, share outs from employees that are doing creative and innovative things with the technology, etc. anything related to AI with an emphasis on the work we do at the college
    - BRAIN (Building Readiness for Al Navigation) Workshop series

- Developed and implemented a series of workshops for the campus community during the 24-25 academic year.
- Planning group for the 25-26 academic year has been formed and will be meeting in early September '25 to establish the workshop plan for the year.

#### Virtual Twin Pilot

- A subgroup of the AI Learning Community has been working on digital twins/avators of themselves over the summer '25. There is approximately 10-12 participants and we are using the D-ID technology, for which the chancellor's office has funded for a license and for stipends to faculty participants. Working on a video currently that the chancellor will use in his opening speech at the Future's Summit. Participants will then implement their products during the fall '25 quarter and solicit feedback from users for which we will gather and use in our final report.
- Developing- exploring KhanMigo Al tutoring
- Creating Coding Careers (CCC): Registered Pre-Apprenticeship & Apprenticeship Program for software engineers focusing on new AI curriculum and opportunities with local employers
  - Created an MOU with CCC to further formalize our partnership. Currently exploring particular state grants which would help to fund these efforts.
- Karl working with Umoja on Al professional development guest speakers from industry
- KCI- Developing Silicon Valley AI Project to assist K-12 districts with AI integrationcurrently engaged in listening sessions & partnership development
- Data Science/AI Club Large number of student participants and projects evolving. In collaboration with ETI.
- Robotics Club Computer Vision branch of AI being used as experiential learning in collaboration with ETI to train robotics for various tasks such as playing chess autonomously.
- AWS DeepRacers ETI connection with AWS getting large number of donations for students to work on. 3 last spring – several students worked on them as projects to enhance their learning with AI - and 10-20 coming shortly. Intent for students to get introductory level understanding of training AI models through the devices. Possibly incorporate into the ALTW 434 TTW class in W'25.
- AWS MIDI keyboards ETI connection with AWS will receive 150+ soon. These can be used as controllers for both music and for ML related learning activities. Previously

- received about 15 or so in spring and distributed to MTECH and used in ETI related settings as controllers.
- Partnership with SJSU through their Career Center to do an SJSU + ETI AI Hackathon at SJSU in spring '26. Zach and Bobbi Makana already met to do the initial planning and a working group has been set up for future meetings which are already in the calendar.
- Speech and Debate Club is experimenting with Yoodli.ai, an AI-powered speech coach.
   Students give their speech to the AI, and then it provides real-time feedback. Professor Anju Vriksha is assessing the trial to determine if she will implement this in her classes.
- 4311 Repurposing this room to turn into an Al hub headquarters.
- Theatre Arts is presenting a production of *R.U.R.* (Rossum's Universal Robots), the 1920 play that first introduced the concept of "robots" and explored the ethics of artificial intelligence, followed by a panel discussion connecting the play's themes to contemporary AI issues in society and the arts.

# **Policy and Process**

- ETAC Al Subgroup focused on BPs/APs.
- Faculty Senate, with major work by Teaching with Technology, working on a collaboration with ETS to ensure agentic AI is not being used to complete coursework or as a means of maintaining fraudulent enrollment
- Al Fellows launching that will have overlap in numerous areas on this sheet

# Faculty/ Staff Professional Learning

- Al Canvas resources through Online Learning
- Al syllabus statements approached from the spectrum (not allowing Al to using Al extensively) with sample syllabi text
- ChatGPT libguide in library (Destiny)
- Numerous Al workshops at flex/ opening day
- Sub group of AI Learning Community (Zach, Sharon, Chessa, Sophia, Rachael, Sally)
  planning workshops for employees and students on AI. Workshops and events being
  planned for roughly once per month this academic year. Working Planning Document: AI
  Workshop Planning Group.docx (see updates in the AI Learning Community portion in this
  document above).
- CCC Futures Summit participation
- Technology Committee Al as a focus of equity for students
- Teaching with Technology (formerly the COOL committee) subgroup of academic senate where AI is part of discussions

- Microsoft Copilot Group of folks piloting paid version in 365
- OL adoption of tools to support work with AI, Rumi & Harmonize
- Coalition of the Willing AI summer 25 learning community for faculty

# **Previous/ Completed Work**

#### Co-curricula

 Career Hacks – What's It Like: Al Careers Revealed on 10/11/24; Al for Career Skills on 10/30/24 (for students).

#### **Policies**

English department created department Al policy

## Faculty/ Staff Professional Learning

- Book Club with DA and FH English Departments on: *Beyond Words: Writing in the Age of AI*.
- English Department hosted lecture with Dr. Damien Williams, Assistant Professor in Philosophy and Data Science at the University of North Carolina at Charlotte, on how technologies are impacted by human values, knowledge systems, and social structures.
- FAC organized a CVC@ONE webinar with Santiago Lyon from Adobe on the <u>Content</u> Authenticity Initiative – <u>Transparency in the Age of Al</u>
- Annual Al conference (Mona), Ethics in Al, Al in Creativity
- KCI 2<sup>nd</sup> Al Summit: Jan 31, 2025
- ETI on 11/6/24: AITA (AI Teaching Assistant) Workshop for Faculty creating virtual assistants in Canvas
- Zach Cembellin and Leslie Valmonte co-presented an AI workshop for ACCCA in Monterey in February.
- NSF grant proposal BRAIN (Building on Ramps for Al Navigation\_ Sophia, Zach, Sharon – not funded but will resubmit to other RFPs

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