ENGINEERING HONORS PROGRAM
UNIVERSITY OF MICHIGAN

CoScribe

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Purpose

- Generate clear and concise summaries of video transcripts
- Provide students with focused understandings of recorded content
- Make study sessions more efficient and effective

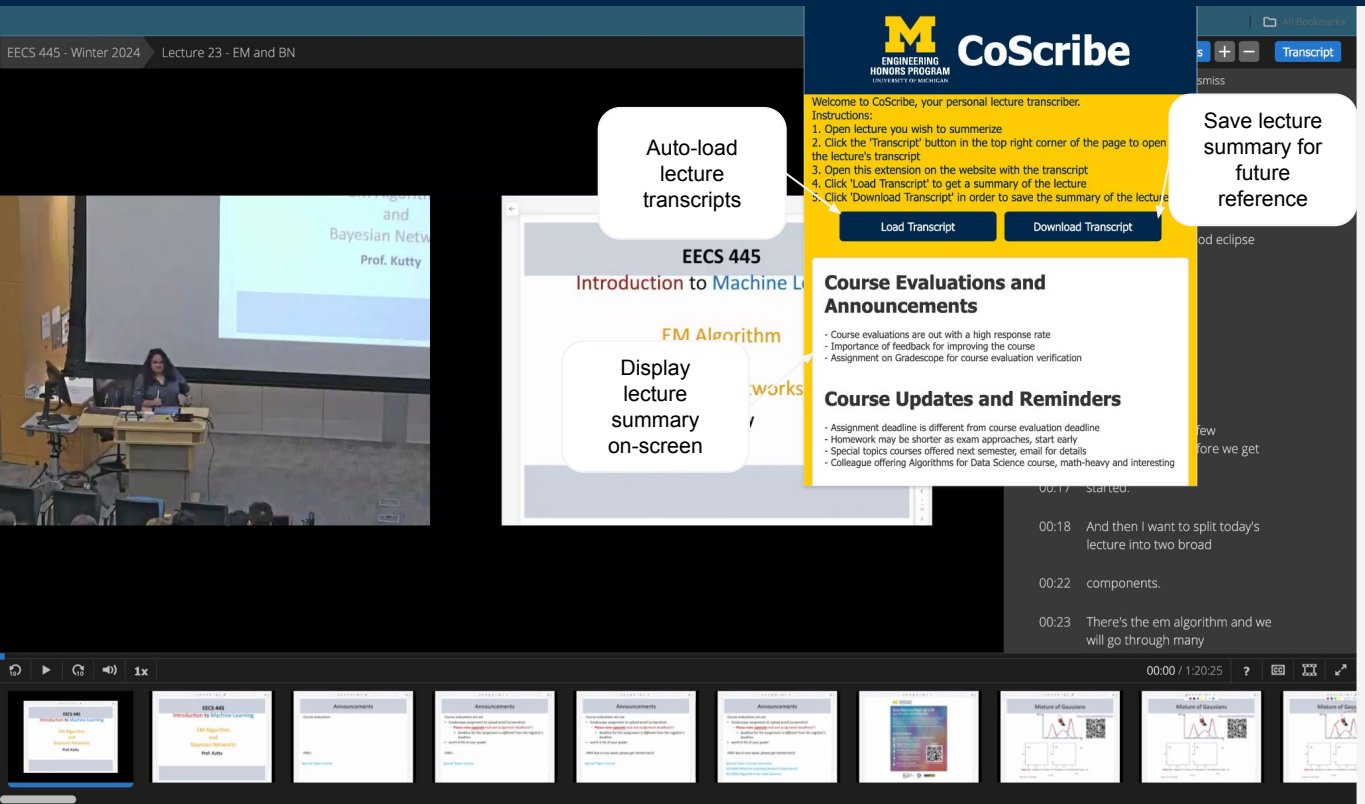
Methods

- **Backend:** Open AI API
- **Frontend:** HTML, CSS, Javascript, Chrome Browser API
- **CoScribe** is a browser extension compatible with Chrome and Edge browsers

Next Steps

- Allow for multiple formats for lecture note download
- Add database on the backend for user login and notes history
- Expand compatibility with YouTube and other video formats

Example Usage



Output

Course Evaluations and Announcements

- Course evaluations are out and feedback is valued
- Incentivizing feedback to improve the course experience
- Assignment on Gradescope to confirm completion of course evaluation

Important Course Deadlines

- Course evaluation deadline is typically before start of finals
- Assignment deadline is different from course evaluation deadline
- Homework for next two weeks is shorter, start early

Special Topics Courses
- Special topics course on research experience in machine learning next semester
- Colleague offering course on Algorithms for data science
- Email for logistical questions about special topics courses

Generative Process and Machine Learning

- Understanding the generative process behind datasets
- Estimating parameters for a single distribution
- Dealing with multiple Gaussian distributions in the generative process

Gaussian Mixture Model

- Using a dice roll analogy to explain picking Gaussian distributions based on outcomes
- Describing probability density function (PDF) and likelihood of points in real space
- Illustrating Gaussian mixture model in two-dimensional feature space with contour plots representing individual Gaussians