

**Stay tuned!**  
**Our webinar will be starting**  
**at 11am**



# Vocareum Notebook for learning AI

# Agenda

Vocareum Overview - Sanjay Srivastava - 15 mins

Vocareum AI Lab demo - Peter Kim - 20-25 mins

Q&A - 20 mins



## Our Mission

Deliver labs for learning  
AI, Data, and Cloud skills

# Our Core Products

Vocareum Notebook for learning AI

Managed labs for learning AWS, Azure, and GCP

Labs for learning programming, Data Science, and Data Engineering - VSCode, Jupyter, Databricks, ...

## Vocareum core capabilities

- Deliver at the right level of abstraction
- Budget management
- Rich suite of assessment options
- Integration with learner environments
- Persistent work area
- Ability to deliver large dataset
- Learner Analytics



# Assessment Options



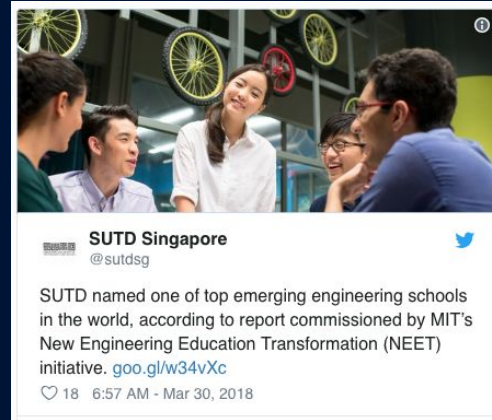
# Supporting high stakes assessment

- Integrated with Safe Exam Browser
- Automatic + Manual Grading
- Scheduled or Asynchronous
- Timed & Passcode Protected

“I can see how it is very challenging to scale up the system so all students can access and work on the exam at the same time.

In previous years, we used our own online platform to handle students' submissions. But, we found Vocareum to be much more maintainable and has better features. Using Vocareum really helps us: we know who submitted, at what time they submitted, and then we can run an auto-grading job immediately.”

—OKA KURNIAWAN, SUTD







**2.4M**

learners to-date

**11,800**

live courses

**125K**

cloud labs started per day

# Learning Platform Partners



# Academic Partners



Arizona State



Auburn



Carnegie Mellon



Columbia



Cornell



Delft University



Georgia Tech



Indiana University



IMT Atlantique



Johns Hopkins



NJIT



Northeastern



Northwestern - Kellogg



Penn State



Purdue



SUTD



Southern NH



Stanford



Tecnologico de Monterrey



RMIT University



UC San Diego



University of Illinois



University of Missouri



Univ of Notre Dame



Univ of Washington



Univ of Wisconsin



USC



Western Illinois

# Deploying Vocareum



## Self paced certificate

Labs for learners to use tools, technology and services in managed environment (policy, budget, etc)



## Degree programs

Administer proctored skills-based certification exams, with automatic scoring



## ILT / Bootcamps

Course material + lab environments to support instructional training events



## High stakes exams

Team-based lab environment with data security, grant management, etc.

# REST API

Build custom experiences using SSO, content management, student submissions and more

The screenshot displays the Vocareum API V2 documentation for the **PUT Part - Update** endpoint. The interface is divided into several sections:

- Introduction:** Provides the endpoint URL: `https://api.vocareum.com/api/v2/courses/{courseid}/assignments/{assignmentid}/parts/{partid}`.
- Request Format:** Lists the endpoint URL.
- Authentication:** Lists the endpoint URL.
- Error Codes:** Lists the endpoint URL.
- Rate limit:** Lists the endpoint URL.
- Base URL:** Lists the endpoint URL.
- Pagination:** Lists the endpoint URL.
- Requests:** A list of API endpoints including `GET Courses`, `GET Course`, `POST Courses - Clone`, `GET Assignments`, `GET Assignment`, `POST Assignments - Copy`, `GET Parts`, `GET Part`, `GET Part - User Details`, **`PUT Part - Update`**, `GET Part - Files`, `GET Resources`, `PUT Resources - Start`, `DEL Resources - Terminate`, and `GET Users`.
- PUT Part - Update:** The main section for the current endpoint.
  - Update a part using specified settings.**
  - Body is a json object to include the following parameters:**
    - `name` - string name for the part
    - `update` - make content live
    - `content` - array consisting of the following:
      - `target` - target directory - lib | asnlb | docs | startercode (required)
      - `url` - source URL for zip content
      - `zipcontent` - base64 encoded zipcontent
      - `reset` - 0 = write files | 1 = clear directory, then write files
- Returns "transactionid" to which may be queried to retrieve request status.**
- HEADERS:**
  - Authorization:** Token (mytoken)
  - Content-Type:** application/json
- BODY raw:**

```
{
  "name": "Part-1",
  "content": [
    {
      "target": "docs",
      "url": "https://api.vocareum.com/api/v2/courses/{courseid}/assignments/{assignmentid}/parts/{partid}/zipcontent",
      "zipcontent": "base64 encoded zipcontent",
      "reset": 0
    }
  ]
}
```

- Example Request:**

```
curl --location --request PUT 'https://api.vocareum.com/api/v2/courses/{courseid}/assignments/{assignmentid}/parts/{partid}' \
--header 'Authorization: Token (mytoken)' \
--header 'Content-Type: application/json' \
--data-raw '{
  "name": "Part-1",
  "content": [
    {
      "target": "docs",
      "url": "https://api.vocareum.com/api/v2/courses/{courseid}/assignments/{assignmentid}/parts/{partid}/zipcontent",
      "zipcontent": "base64 encoded zipcontent",
      "reset": 0
    }
  ]
}'
```
- Example Response:**

```
202 - Accepted
{
  "status": "success",
  "message": "Queued",
  "queueid": "3"
}
```

# Vocareum Fully Managed Labs For AI

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## **Prompt Engineering**

Use OpenAI token

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## **Train/Fine Tune a model**

Use GPUs

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## **Fine Tune model using API**

Fine tune GPT 3.5 models

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# What problem are we really solving?

*Managed delivery of two key resources: GPUs and OpenAI tokens*

- For Learners:
  - No need to create their own OpenAI account or provision GPU resources
  - No complicated setup to train models; use GPU with a single click
- For Instructors:
  - Can control the budget consumed at each problem level
  - Use the most cost-effective GPU - admins configure GPU size, spot pricing, scaling policy, etc.
  - The environment comes pre-configured with all the popular packages and frameworks but can be customized.
- For All:
  - No need to worry about cost explosion!

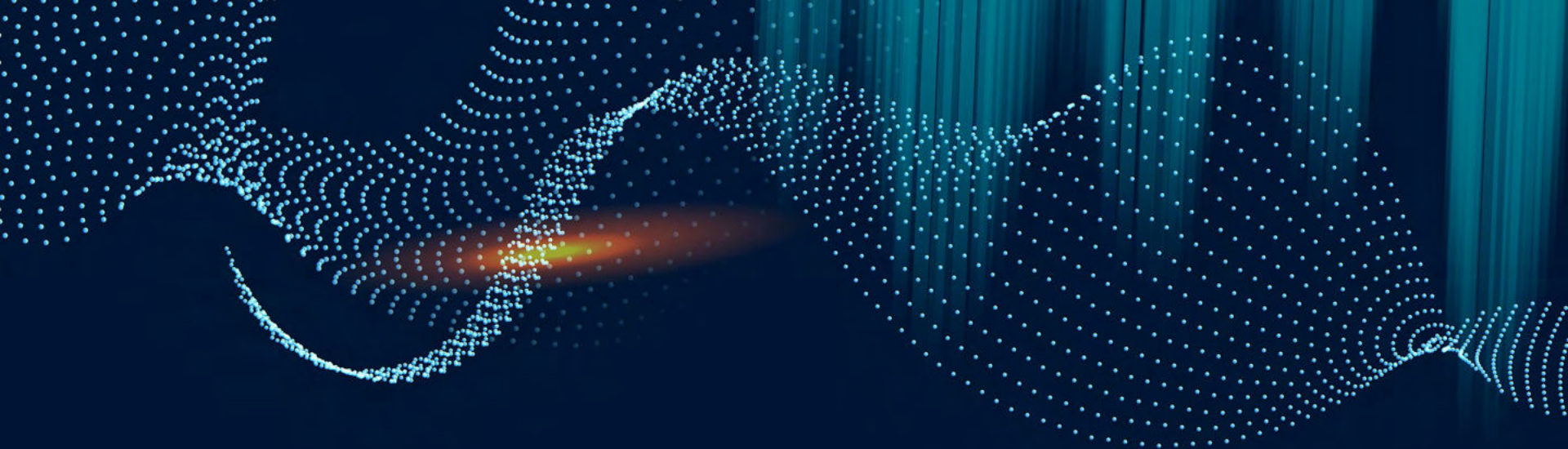
# Roadmap

- Support more training targets - Lambda labs, Foundry, Azure, GCP, etc.
- Support more deployment targets.



## Next Steps

Please ask for more detailed demos or pilot -  
[sales@vocareum.com](mailto:sales@vocareum.com)



**Thank you**

[www.vocareum.com](http://www.vocareum.com)