



# JAY LIANG

## 作品集

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*Android, iOS, web, backend, infra, NLP*

# SOMER

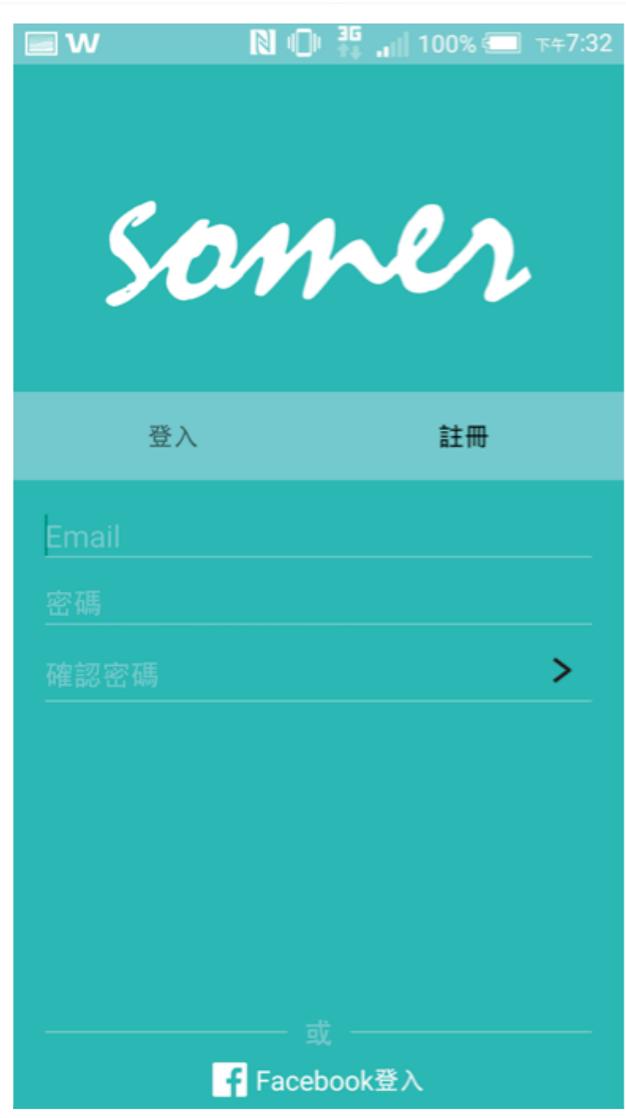
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匿名社群平台, *Android & Backend*

# SOMER

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- 匿名社群平台
- 獨立開發 Android 與 Backend (建立在 Parse 上)
- Google Play 評分 4.08，下載量一到五萬



# ALCHEMA

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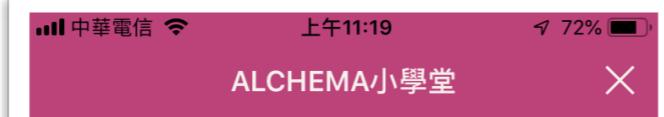
物聯網智慧釀酒機, *backend, infra, web app, android, iOS*

# ALCHEMA

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- 物聯網智慧釀酒機 (<https://www.alchema.com>)
- 獨立設計、架構、開發後端與雲端基礎設施 (AWS)
  - Infra: ALB + Target Group + ECS + PostgreSQL
  - Backend: Koa.js + Bookshelf.js + j2s
- 獨立製作內部使用的 dashboard (React + Redux)
- 使用自行研發，能夠快速建置後端的模組 j2s (<https://www.npmjs.com/package/j2s>)
- 接手既有 Android 與 iOS app 開發

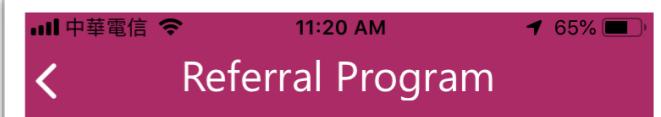
# ALCHEMA - IOS APP



我們提供各種不同的小課程，讓大家一步一步了解ALCHEMA怎麼操作與發酵的基本知識。

每個課程設計都不太一樣，點擊各個課程內觀看教學文章、影片，與一些小關卡，讓大家不知不覺成為達人！

- 1 糖該怎麼使用？ 完成 ✓ >
- 2 糖與水果對酒體的影響？ 1/2 >
- 3 新鮮水果、果汁，與冷凍水果的差異？ 1/2 >



Invite friends to ALCHEMA

One more benefit of friendship! Tell your friends how much you love ALCHEMA and share your unique 10% OFF discount code with them. When they purchase an ALCHEMA, you get 5 packets of yeast.

Your first 3 referrals earn you a free pitcher.

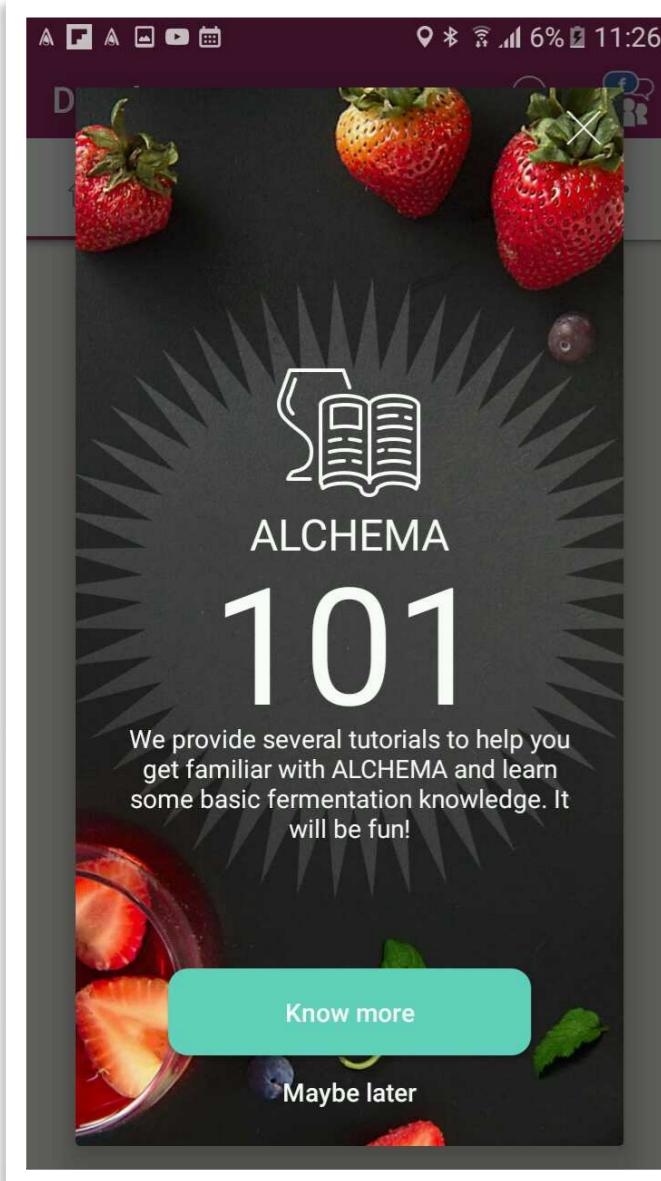
[Click here to know how it works](#)

Your unique 10% OFF code

test-referral-T58-F8P

Share

# ALCHEMA - ANDROID APP



ALCHEMA 101

1 LESSON How to use sugar wisely? Done ✓ >

2 LESSON The impact to the drink body from sugar and fruit. (1/2) >

3 LESSON The different impacts to the drink body from different forms of fruit. (1/2) >

ALCHEMA 101

How to use sugar wisely?  
Fermentation 101 | yeast turns sugar into alcohol.

Read on

Skill Learned! ✓

This lesson comes along with a designated recipe!  
We highly recommend you to follow the designated recipe and see how to use what you learned in a recipe.

Start making the designated recipe!

Practice took! ✓

Referral Program

Invite friends to ALCHEMA

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Your first 3 referrals earn you a free pitcher.

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test-referral-T58-F8P

Share

# ALCHEMA DASHBOARD - RECIPES



jay



PAGES

- Home
- Recipes
- Brewing Chart
- Upload Photos
- Relations

## ALCHEMA

SEARCH

### Honey wine (Mead)





ALCHEMA

Prep time: 5 mins Best for the first time users. Designated recipe for lesson 1 and 4. (You can find more lessons in 「more」 section.) Mead has a soft, ...

 Duration	<b>10 DAYS(25.7°C)</b>	 Sweetness	
 Fridge Days	<b>5 DAYS</b>	 Astringent	
 Recommended Temp. Range	<b>16~26°C</b>	 Bitterness	
 Alcohol Content	<b>5.1%</b>	 Acidity	

### Strawberry Rosé

# ALCHEMA DASHBOARD - BREWING CHART

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Search...

PAGES

 Home

 Recipes

 Brewing Chart

 Upload Photos

 Relations

## ALCHEMA

### Get User Brewings

Username Nickyo (2/148)

show in progress only

#### Saké flavor cider



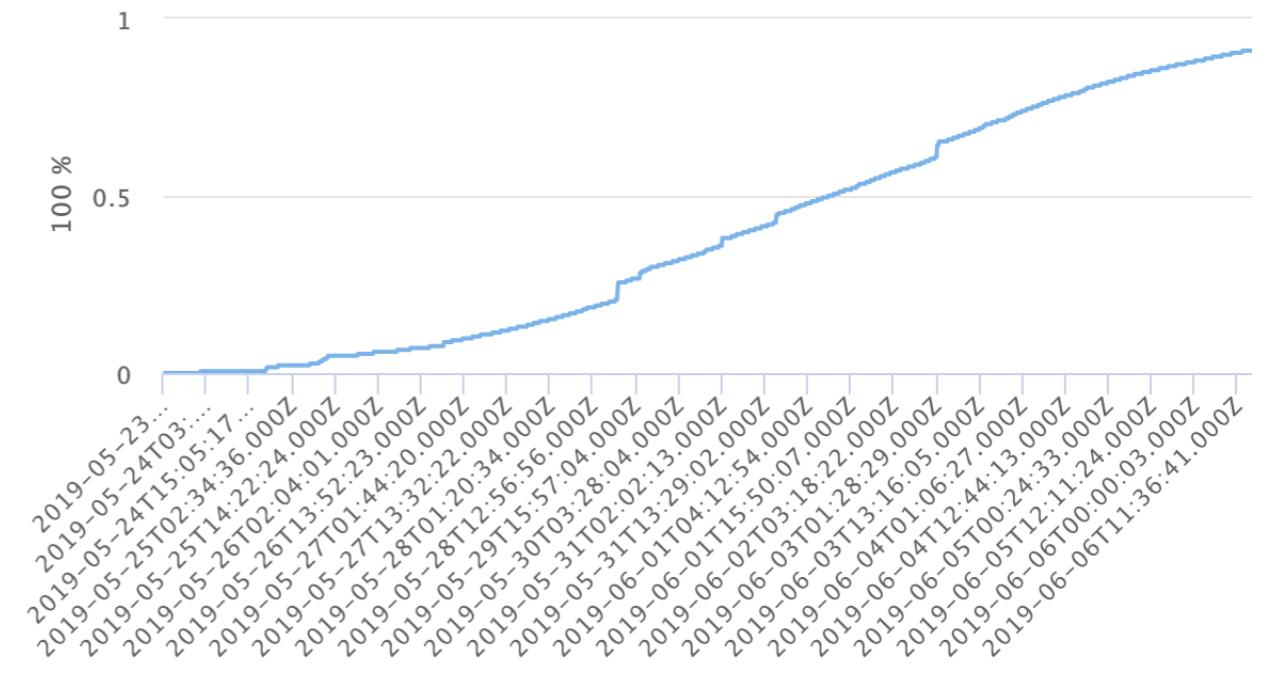
ID: 10795  
Started At: 2019/5/24 上午 12:06:33  
Finished At: Not yet  
Canceled At: Not yet  
Expect Finish Time: 2019/6/8 下午 9:12:01

蜂蜜酒

### Chart



#### Progress



The chart displays the progress of brewing activities over time. The Y-axis represents progress from 0% to 100%. The X-axis shows dates from May 23, 2019, to June 11, 2019. A single blue line represents the cumulative progress, which starts at 0% and rises steadily to approximately 85% by June 11.

Highcharts.com

#### Alcoholicity



The chart displays the alcoholicity of brewing activities over time. The Y-axis represents alcoholicity from 0.1 to 1. The X-axis shows the same date range as the progress chart. A single blue line represents the cumulative alcoholicity, which starts near 0.1 and rises to approximately 0.25 by June 11.

# ALCHEMA DASHBOARD - UPLOAD PHOTO

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Search...

PAGES

-  Home
-  Recipes
-  Brewing Chart
-  Upload Photos
-  Relations

ALCHEMA

Try dropping some files here, or click to select files to upload.

UPLOAD



They grow up so fast

ALCHEMA production dashboard v4.0.5

# HAC, PAT-TREE

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*NLP modules*

# NATURAL LANGUAGE PROCESSING

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- HAC
  - <https://www.npmjs.com/package/hac>
  - Hierarchical Agglomerative Clustering
  - 非監督式文章分群
- Pat-tree
  - <https://www.npmjs.com/package/pat-tree>
  - 中文斷字演算法

# 後端建置服務

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提供後端建置 & 雲端基礎設施建設的服務

# 服務說明

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- 我能提供的服務包含
  - 軟體後端的架構設計
  - 資料庫設計
  - RESTful API 建置
  - 具有可擴展性與容錯度的雲端基礎設施佈建

## 後端

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- RESTful API，符合主流前後端串接格式。
- 使用 Node.js 為開發環境，非阻塞式排程成為高流量服務後端的理想選擇。
- 使用 Koa.js 作為後端框架，極大的客製化彈性以及極佳的社群資源支援度。
- 使用 Bookshelf.js 作為 ORM 模組，同樣具備高度客製化彈性。
- 使用自行研發的 j2s (node.js module) 作為 API 建置工具。

## J2S 特色

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- 提供前端強大而彈性的查詢能力，前端可使用 json 格式下達類 SQL 語句的關鍵字，表達查詢需求。
- 提供存取控管的設置，只讓符合權限的用戶存取資源。
- 快速開發，當資料庫中新增資源後，只要設定好 ORM 關聯，資源的 CRUD 立即可用，不需額外寫 code。
- 高度客製化空間，可在 ORM model 上定義 member function 擴充前端傳來的查詢語句，或在回傳的資料附掛額外資訊。
- plug & play，在 Koa.js 框架中掛載 j2s 後即可使用，往後想要移除 j2s 也不會影響其他獨立 API 的運作。
- 完整而詳盡的 documentation，以及後續的維護、功能擴充等支援。
- 經 ALCHEMA 經驗認證，符合新創團隊早期快速開發以及 production 環境的需求。

## 雲端基礎設施

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- 使用 AWS 作為後端環境，是業界主流的雲端服務選擇。
- 使用 PostgreSQL 作為資料庫選擇，具備關連式資料庫的優點，同時也能儲存 JSON 格式的文件。
- 採用 Load balancer, Target Group, EC2, ECS 的架構，具高擴展性與容錯性。
- 使用 Terraform 作為佈建工具，部署的資源清晰明瞭而易於管控。

## 收費方式

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- 上述後端與雲端服務的建置，一套十萬元台幣，包含 10 個 table schema 的設計，以及兩個獨立 API 的開發(如登入等功能)。
- 每個 table schema 設計額外收費 1,000 元。
- 每個獨立 API 的開發額外收費 1,000 ~ 5,000 元，視功能複雜度而定。
- 後續功能維護與更新，每月收費 10,000 ~ 25,000 元，視功能複雜度而定，沒有維護需求的月份不用收費。
- 以上價碼皆可根據團隊狀況而調整，溝通討論出適合團隊的解決方案。
- 團隊須自行負擔 AWS 上的所有服務費用。