

# Char Juin Chin

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in/chincharjuin in

**Languages:** Python, Java, Scheme, C, RISC-V, HTML, SQL

**Frameworks:** pandas, scikit-learn, NLTK, Gensim, Tensorflow, CatBoost, Firebase, Gherkins

## Education

### University of California, Berkeley

Aug 2020 – May 2024 (Expected Graduation)

- Sophomore, BA in **Computer Science** and **Linguistics** (4.00/4.00 GPA, Dean's List – Spring 2021)
- *Relevant Coursework:* Structure and Interpretation of Computer Programs (CS61A), Data Structures (CS61B), Computer Architecture (CS61C), Discrete Mathematics and Probability (CS70), Efficient Algorithms and Intractable Problems (CS170), Linear Algebra (MATH54), Linguistic Science (LING100), Phonetics (LING110), Syntax (LING120)

## Experience

### Data and Analytics Intern

May 2021 – Jun 2021

Information Technology Department, Singapore Airlines

- Modeled the adoption rates of an e-Commerce platform and associated key predictors using **pandas**, **scikit-learn** and **CatBoost**
- Facilitated data analysis by constructing a data dictionary of over 240 **Firebase** events for an in-house customer mobile application

### Ground Experience Development Intern

Mar 2020 – Apr 2020

Customer Care Services Department, Singapore Airlines

- Ensured smooth implementation of a newly developed voucher issuance system by performing integration tests using **Gherkins**
- Prevented customer backlash by catching 2 critical errors during User Acceptance Tests of an online COVID assistance form
- Evaluated the performance of semantic analysis by an in-house feedback analytics model through validating over 1000 test cases
- Streamlined testing of systems undergoing development by automating the generation of customizable test scripts in **Python**

## Leadership and Awards

### Lieutenant

Jan 2018 – Nov 2019

3<sup>rd</sup> Signals Battalion, Singapore Armed Forces, Singapore

- Trained the operations branch of an active-duty battalion of 500 men through two battalion exercises to operational readiness
- Directed battalion safety-related initiatives as a Safety Officer, achieving full audit clearance by the Army Safety Inspectorate
- Recipient of the Commanding Officer's Coin and Letter of Appreciation for leadership qualities and contributions to the unit

### A\*STAR Science Award (Junior College)

Aug 2016

Institute for Infocomm Research, Agency for Science, Technology, and Research (A\*STAR), Singapore

- Awarded as one of 100 students nationwide for a developmental program in the sciences in view of academic achievements
- Recommended for a research opportunity with the organization to explore extra-curricular topics with professional mentorship

## Publications and Projects

C. C. Juin, et al., "Punctuation prediction using a bidirectional recurrent neural network with part-of-speech tagging," **TENCON 2017 - 2017 IEEE Region 10 Conference, 2017, pp. 1806-1811, doi: 10.1109/TENCON.2017.8228151.d**

Institute for Infocomm Research, Agency for Science, Technology, and Research (A\*STAR), Singapore

- Authored a paper on a bi-directional recurrent neural network, trained in English corpora, to predict punctuation using **Tensorflow**
- Implemented an attention mechanism, biased decoding, and part-of-speech tagging with the **Stanford Part-of-Speech Tagger**
- Designed a model that achieved an overall F-score of 0.785 across all tested punctuation marks and an F-score of up to 0.986 on select punctuation marks with OpenNMT Torch, improving prediction accuracy over previous state-of-the-art models by 10%

### NucScholar

Sep 2021 – Present

Research Apprentice, Nuclear Data Group, University of California, Berkeley

- Engineering topic modeling techniques to improve categorization and searching of nuclear research using **NLTK** and **Gensim**

### Vivensity

Sep 2021 – Present

Data Consultant, Big Data at Berkeley

- Developing a data-driven approach towards benefit-cost analysis of Social and Emotional Learning curriculums in the Bay Area
- Dashboarding student engagement and emotional well-being metrics using sentiment analysis to enhance teaching efficacy

## Skills and Interests

- Foreign languages: Chinese (native), Japanese (conversational), and French (elementary)
- Hobbies: Hiking, Dancing, Singing, Coffee making, Playing the guitar, Japanese music