# Ethan Chau

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## **FDUCATION**

#### **UNIVERSITY OF WASHINGTON**

**B.S., COMPUTER SCIENCE** (DATA SCIENCE OPTION) **B.A., LINGUISTICS** 

Expected June 2020 | Seattle, WA GPA: 3.97 | Dean's List Au '16 - Au '19

## COURSEWORK

Natural Language Processing • Machine Learning • Artificial Intelligence • Algorithms • Data Structures & Parallelism • Computer Security • Data Management • Systems Programming • Data Visualization • Software Design & Implementation • Programming Languages

# **SKILLS**

## **PROGRAMMING**

Proficient

Java • JavaScript • Python Familiar

Bash • C/C++ • C# • Google Protobuf • HTML/CSS • Ruby • SCSS • SQL

#### **TECHNOLOGIES**

AllenNLP • AssertJ • Cloudbees Jenkins • EasyMock • Fisheye • Git • JIRA • NumPy • PyTorch • React.js • Spring Framework • Upsource

#### **LANGUAGES**

English (Native) • Mandarin (Fluent) • Cantonese (Proficient) • Spanish (Intermediate)

# LEADERSHIP

## **CORE TEAM MEMBER**

COMMON GROUND FELLOWSHIP Aug. 2017 - Aug. 2018

# INTERESTS

Natural Language Processing • Machine Learning • Data Science • Piano • Violin • Guitar • Tennis • Ultimate Frisbee

# AWARDS

2018 - Phi Beta Kappa Nat'l Honor Society 2017 - UW Annual Dean's List

2017 - **3rd Place**, Google Games Seattle

## WORK FXPERIENCE

#### **UNIVERSITY OF WASHINGTON | NLP RESEARCH ASSISTANT**

Mar. 2018 - Present | Seattle, WA | Advisors: Prof. Noah A. Smith, Lucy Lin

- Developing a system for parsing nonstandard dialects of English
- Designing **PyTorch** models for low-resource contextual word representation

#### **UNIVERSITY OF WASHINGTON | TEACHING ASSISTANT**

Jan. 2019 - Mar. 2019 | Seattle, WA | Instructor: Prof. Noah A. Smith

- Course: CSE 447/547M (Natural Language Processing)
- Developed and administered a new **PyTorch** and **AllenNLP** -based text classification assignment
- Designed and **led** a weekly discussion section for 35 students
- Held weekly office hours to respond to student questions

## INDEED.COM | SOFTWARE ENGINEERING INTERN (BACKEND/DATA) June 2018 - Aug. 2018 | Seattle, WA

- Integrated an NLP library into a backend suggestion service and developed a text extraction-based heuristic, yielding **6x** the number of acceptances and reaching 2x as many users as the next best source
- Architected and developed a **Java-Protobuf** service infrastructure for machine learning evaluation that decreased required service calls by 5x, increased logging coverage by 15x, and enabled model onboarding in 5 lines of code
- Deployed a **Jenkins-** and **Mesos-** based continuous integration system

## INDEED.COM | SOFTWARE ENGINEERING INTERN (FULL STACK) June 2017 - Sept. 2017 | Seattle, WA

- Built and stylized a custom **React** frontend to minimize server load
- Upgraded a Java data storage model in response to client feedback
- Developed a set of **REST API** controllers with a test coverage of **over 90%**
- Implemented an extensible backend service format for efficient data retrieval.

## **PROJECTS**

#### WHERE'S MY BUS? I FULL-STACK WEB APP

Mar. 2018 - Present | A lightweight transit tracker for the Seattle area

- Implemented a **Bottle** -based **Python** API wrapper to process incoming data
- Managed API deploy to **Azure App Service** for high-speed request processing
- Designed and built a lightweight **React** frontend for dynamic content delivery

### ECHAU18.GITLAB.IO | Personal Portfolio

Sept. 2017 - Present | A sleek, portable website generator

- Integrated SCSS with React to design a modular, responsive frontend
- Defined a lightweight **JSON** data entry format for code-free site generation
- Configured a custom **Brunch** build system to streamline deploy process

#### **EVC CHARGE** | WINDOWS METRO APP

May 2015 - Aug. 2016 | A charging station locator for electric vehicles

- Utilized **C#** and **XAML** to integrate UI with implementation
- Designed and programmed custom Metro controls to display station data

# COMMUNITY INVOLVEMENT

# EVANGELICAL CHINESE CHURCH | TAIWAN/AWANA YOUTH LEADER

Sept. 2013 - Sept. 2018 | Redmond, WA & New Taipei City, Taiwan

- **Designed** and taught daily English classes to 20+ under-resourced youth
- Facilitated daily re-evaluations with fellow teachers of content and methods
- Supervised and **mentored** incoming youth leaders