# Ethan Chau

C ethch18 | in echau18
□ (425) 429-8465 | echau18@cs.uw.edu | echau18.gitlab.io

# **FDUCATION**

#### **UNIVERSITY OF WASHINGTON**

B.S., COMPUTER SCIENCE (DIRECT ADMISSION) B.A., LINGUISTICS

Expected June 2020 | Seattle, WA GPA: 3.99 | Dean's List Au '16 - Sp '18

# COURSEWORK

Natural Language Processing • Artificial Intelligence • Algorithms • Data Structures & Parallelism • Computer Security • Data Management • Systems Programming • Software Design & Implementation • Hardware/Software Interface • System & Software Tools

# SKILLS

#### **PROGRAMMING**

Proficient

Java • JavaScript • Python • SQL Familiar

Bash Shell • C/C++ • C# • Google Protobuf

#### **TECHNOLOGIES**

Spring Framework • React.js • AllenNLP • PyTorch • Git • AssertJ • EasyMock • JIRA • Fisheye • Upsource • HTML/CSS • SCSS

#### **LANGUAGES**

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

# LEADERSHIP

#### **CORE TEAM MEMBER**

Common Ground Fellowship Aug. 2017 - Present

# 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 EXPERIENCE**

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

- Integrated a **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 a robust **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

#### UNIVERSITY OF WASHINGTON CSE | UGRAD RESEARCH ASSISTANT

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

- Undergraduate research assistant in the Noah's ARK NLP lab
- Investigated **PyTorch** -based models with task-specific embeddings for high-performance **domain adaptation** in **natural language inference**

# 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? | 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

#### OH MY ENGLISH | CLASS PROJECT FORK

Dec. 2016 - Jan. 2017 | A dynamic English phrase generator

- Implemented a Java scraping and parsing system to build word database
- Extended class's sentence generator to utilize both grammars and wordlists

#### **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+ underprivileged youth
- Facilitated daily reevaluations with fellow teachers of content and methods
- Supervised and **mentored** incoming youth leaders