Xi Wen

looking for summer intern 06/10/2023 - 09/22/2023

Mobile: (408)806-4969
Email: xwen20@ucsc.edu
Address: 707 Pelton Ave Apt 203, CA, 95060

Skills

Programming languages: C/C++, Python, SQL, Java, JavaScript, HTML, PHP
Tools: Git, TensorFlow, PyTorch, Vim, VS Code, Docker, LaTeX
Operating systems: Linux(Ubuntu), MacOS, Windows

Education

University of California, Santa Cruz — Santa Cruz, CA
M.Sc. in Computer Science and Engineering; Major GPA: 4.00/4.00 — *Sep 2022 – Fall 2023 (M.Sc.)*

Hong Kong Polytechnic University — Hong Kong
B.Sc. in Computing; Major GPA: 3.61/4.00 — *Sep 2016 – June 2020 (B.Sc.)*

University of Maryland, College Park — College Park, MD
Exchange Program; Major GPA: 3.85/4.00 — *Jan 2019 – May 2019*

Work/Research Experiences

Tencent Holdings Ltd. — Beijing, China
*Software Engineer, on **video recommendation*** — *Aug 2020 – July 2022*
*for **WeChat Channels** (using **C++** and **Python**):*

- **Added music as a source of recalling music:** Trained a **CNN model** to predict user favorite background music based on user favorite songs and recalled good videos with those background music. Increased **total play time by 7%** and **Day 1 retention by 0.3%**.
- **Identified, implemented, and incorporated features for the ranking models:** Introduced user historical portraits and video tags provided by external teams, defined new features like user long-term interest tags, and incorporated them into the ranking model with appropriate crossover. Increased **total play time by 4%** and **video views by 2%**.
- **Implemented a thorough monitoring alarm and hourly report system for features and labels in data flow:** Customized checking methods for each feature or label by defining error codes, code refactoring, and running statistics by writing **SQL** from the **ClickHouse** table. **Caught 4 bugs** brought by upstream changes.

UMIACS, University of Maryland, College Park — College Park, MD
*Research Assistant, advised by Dr. Jordan Boyd-Graber on **NLP*** — *June 2019 – Aug 2019*

- **Built a neural network retention model in Python using PyTorch to estimate the users' memory strength:** Fine-tuned **the BERT model** to learn the text representation and encode the flashcard questions and added other users' features like user historical correct rate. Increased **the accuracy** of predicting the probability of the user recalling the flashcard answer **by 7%** than the logistic regression baseline.

Hong Kong Polytechnic University — Hong Kong
*Research Assistant, advised by Dr. Yixin Cao on **graph theory, computational complexity*** — *Feb 2018 – June 2018*

- **Worked on the Steiner tree problem (STP) on graphs:** Submitted a heuristic algorithm **in C** to PACE 2018 solving 90% instances each within 2 seconds with an approximation ratio less than 10.

MIT CSAIL — Cambridge, MA
*Visiting Student, advised by Prof. Hal Abelson on **block programming implementation*** — *Jul 2017 – Aug 2017*

- **Indoor positioning blocks:** Built IoT indoor positioning blocks by using Bluetooth Low Energy **in Java** for MIT App Inventor.

Publications and Papers

1. Wen Xi and Evan W Patton.
   Blocks-Based Approaches to Internet of Things in MIT App Inventor.
   SPLASH 2018 BLOCKS+ Workshop, Nov. 5, 2018, Boston, MA. `[Paper]`.

Selected Honors And Awards

The Hong Kong Polytechnic University Scholarship (2017)
HKSAR Government Scholarship Fund – Reaching out Award (2017)
Student of the Year with Best Academic Performance (2016)

UNIVERSITY OF CALIFORNIA
SANTA CRUZ

***** U N O F F I C I A L *****

Name: **Wen, Xi**
Student ID: **2005917**

Institution Info: University of California, Santa Cruz
1156 High Street
Santa Cruz, CA 95064

Beginning of Graduate Record

2022 Fall Quarter

Program: Computer Science & Engineer
Plan: MS in Computer Science and Engineering

Course		Description	Attempted	Earned	Grade	Points
CSE	200	Research & Teaching	3.00	3.00	S	0.000
CSE	201	Analysis Algorithms	5.00	5.00	A	20.000
LAAD	210	OralCommunication:TAs	2.00	2.00	S	0.000

Academic Standing Effective 12/14/2022: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	10.00	10.00	5.00	20.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	10.00	10.00	5.00	20.000
Cum GPA	0.00	Cum Totals	10.00	10.00	5.00	20.000
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	0.00	Comb Totals	10.00	10.00	5.00	20.000

Graduate Career Totals

Cum GPA:	0.00	Cum Totals	10.00	10.00	5.00	20.000
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	0.00	Comb Totals	10.00	10.00	5.00	20.000

End of *** U N O F F I C I A L ***

THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

TRANSCRIPT OF STUDIES
學業成績表

Name: WEN Xi (温希)
ID / Passport No.: 120113199804260*** Student No.: 16098574D

Study Starting From	Programme Title	Mode of Attendance
2016-2017 Semester 1	BSc (HONS) INTERNET & MULTIMEDIA TECHNOLOGIES	FULL-TIME
2017-2018 Semester 1 (Transferred study)	BSc (HONS) COMPUTING	FULL-TIME
2017-2018 Semester 2	BSc (HONS) COMPUTING MINOR IN BUSINESS ADMINISTRATION	FULL-TIME
2019-2020 Semester 2	BSc (HONS) COMPUTING	FULL-TIME

Qualification(s) Attained

BACHELOR OF SCIENCE IN COMPUTING (GPA for Major: 3.61)
WITH SECOND CLASS HONOURS, DIVISION 1
GPA for Award: 3.61
Year/Semester of Graduation: 2019-2020 Semester 2
Year of Award: 2020

Subject Code/Title		Credit	Grade/Code
2016-2017 Semester 1	GPA (cumulative): 4.00		
AMA1110	BASIC MATHEMATICS I - CALCULUS AND PROBABILITY & STATISTICS	3.0	A+
EIE1002	ELECTRONICS SCIENCE	3.0	A+
EIE2106	SIGNAL AND SYSTEM ANALYSIS	3.0	A+
ELC1014	ADVANCED ENGLISH FOR UNIVERSITY STUDIES	3.0	A
ENG1003	FRESHMAN SEMINAR FOR ENGINEERING	3.0	C+
ENG2002	COMPUTER PROGRAMMING	3.0	A
2016-2017 Semester 2	GPA (cumulative): 3.91		
APSS1L01	TOMORROW'S LEADERS	3.0	A
COMP1003	STATISTICAL TOOLS AND APPLICATIONS	1.0	B+
COMP1011	PROGRAMMING FUNDAMENTALS	3.0	A+
COMP2012	DISCRETE MATHEMATICS	3.0	A
COMP3512	LEGAL ASPECTS, PROFESSIONALISM AND ETHICS OF COMPUTING	3.0	A+
ELC2012	PERSUASIVE COMMUNICATION	3.0	B+
ELC3521	PROFESSIONAL COMMUNICATION IN ENGLISH	2.0	A
ENGL2001	ENGLISH FOR PROFESSIONAL COMMUNICATION	3.0	C+
2016-2017 Summer Term	GPA (cumulative): 3.85		
Joined an exchange programme			
APSS1A21	SERVICE LEADERSHIP	3.0	B
2017-2018 Semester 1	GPA (cumulative): 3.81		
COMP1001	PROBLEM SOLVING METHODOLOGY IN INFORMATION TECHNOLOGY	3.0	A
COMP2011	DATA STRUCTURES	3.0	A+
COMP2021	OBJECT-ORIENTED PROGRAMMING	3.0	C
COMP2121	E-BUSINESS	3.0	A
COMP2411	DATABASE SYSTEMS	3.0	B+
COMP2421	COMPUTER ORGANIZATION	3.0	A
COMP4422	COMPUTER GRAPHICS	3.0	B

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Name: WEN Xi (温希)
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Subject Code/Title		Credit	Grade/Code
2017-2018 Semester 2	GPA (cumulative): 3.66		
AF2111	ACCOUNTING FOR DECISION MAKING	3.0	B
CBS1102P	ADVANCED COMMUNICATION SKILLS IN CHINESE	3.0	B+
COMP2222	INTRODUCTION TO HUMAN-COMPUTER INTERACTION METHODS	3.0	B
COMP2322	COMPUTER NETWORKING	3.0	B+
COMP2432	OPERATING SYSTEMS	3.0	B+
COMP3021	PROGRAMMING LANGUAGE PARADIGMS	3.0	B+
COMP4434	BIG DATA ANALYTICS	3.0	B
2018-2019 Semester 1	GPA (cumulative): 3.74		
COMP2021	OBJECT-ORIENTED PROGRAMMING	3.0	A
COMP3011	DESIGN AND ANALYSIS OF ALGORITHMS	3.0	B+
COMP3211	SOFTWARE ENGINEERING	3.0	A
COMP3438	SYSTEM PROGRAMMING	3.0	A
COMP4433	DATA MINING AND DATA WAREHOUSING	3.0	B+
2018-2019 Semester 2	GPA (cumulative): 3.74		
Joined an exchange programme			
2019-2020 Semester 1	GPA (cumulative): 3.74		
CLC3242P	CHINESE FOR PROFESSIONAL COMMUNICATION IN COMPUTING	2.0	B+
COMP4913	CAPSTONE PROJECT	6.0	L
2019-2020 Semester 2	GPA (cumulative): 3.63		
BME1D04	SKIN-CARE TECHNOLOGIES: PRINCIPLES, APPLICATIONS AND SAFETY	3.0	B+
CBS2C04P	APPRECIATION OF THE FOUR GREAT CLASSICAL CHINESE NOVELS	3.0	B+
CC2S01P	APPRECIATING AND APPLYING CHINESE LITERARY MASTERPIECES IN MODERN DAILY LIFE	3.0	B
COMP3000	WORK INTEGRATED EDUCATION	4.0	P
COMP4913	CAPSTONE PROJECT	6.0	C+

Credit Transfer

Subject Code/Title		Credit	Grade/Code
2017-2018 Semester 1			
AMA1104	INTRODUCTORY PROBABILITY	2.0	N/A
APSS1A21	SERVICE LEADERSHIP	3.0	B
APSS1B11	GLOBALIZATION AND THE CHANGING MIDDLE CLASS	3.0	N/A
APSS1L01	TOMORROW'S LEADERS	3.0	A
COMP1003	STATISTICAL TOOLS AND APPLICATIONS	1.0	B+
COMP1011	PROGRAMMING FUNDAMENTALS	3.0	A+
COMP2012	DISCRETE MATHEMATICS	3.0	A
COMP3511	LEGAL ASPECTS AND ETHICS OF COMPUTING	2.0	N/A
COMP4431	ARTIFICIAL INTELLIGENCE	3.0	N/A
EIE1002	ELECTRONICS SCIENCE	3.0	A+
EIE2106	SIGNAL AND SYSTEM ANALYSIS	3.0	A+
ELC1014	ADVANCED ENGLISH FOR UNIVERSITY STUDIES	3.0	A
ELC2012	PERSUASIVE COMMUNICATION	3.0	B+
ELC3522	ENGLISH FOR TECHNICAL PROJECT WRITING	2.0	A
ENG2002	COMPUTER PROGRAMMING	3.0	A
2019-2020 Semester 1			
COMP3903	TRANSFERRED CREDITS FOR SUBJECTS STUDIED OVERSEAS (9 CREDITS)	9.0	N/A

THE HONG KONG POLYTECHNIC UNIVERSITY
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Name: WEN Xi (温希)
ID / Passport No.: 120113199804260*** Student No.: 16098574D

Subject Withdrawal

Subject Code/Title		**Credit**
2018-2019 Semester 1		
COMP4122	GAME DESIGN AND DEVELOPMENT	3.0

Credit Requirement and Attainment

BSc (HONS) COMPUTING
Programme Credit Requirement: 124.0 including 4.0 Training credit(s)
Student Credit Requirement: 121.0 including 4.0 Training credit(s)

Credits Attained: 124.0 including 4.0 Training credit(s)

Other Mandatory Graduation Requirement(s)

Completed (separate certification(s) is/are issued)
- approved Healthy Lifestyle programme
- approved Work-integrated Education activities

Remarks

- Included in the Dean's Honours List 2016/17.

- End of Transcript -

for Registrar

THE HONG KONG POLYTECHNIC UNIVERSITY 香港 理工大學

Date of Issue: 01 September 2021

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EXPLANATION

1. Credit

A credit is used to indicate student effort. A student is expected to spend about 35 to 45 hours of study (inclusive of contact hours, private study, etc.) to earn a credit.

2. Grade/Code

Grade/ Code	Grade Point *(From 2020-21)*	Interpretation *(From 2020-21)*	Grade Point *(Before 2020-21)*	Interpretation *(From 2009-10 to 2019-20)*	Interpretation *(From 2002-03 to 2008-09)*	Interpretation *(Before 2002-03)*
A+	4.3	Excellent	4.5	Exceptionally Outstanding	Excellent	Outstanding
A	4.0		4.0	Outstanding		Excellent
A-	3.7		*(Not Applicable)*	*(Not Applicable)*	*(Not Applicable)*	*(Not Applicable)*
B+	3.3	Good	3.5	Very Good	Good	Very Good
B	3.0		3.0	Good		Good
B-	2.7		*(Not Applicable)*	*(Not Applicable)*	*(Not Applicable)*	*(Not Applicable)*
C+	2.3	Satisfactory	2.5	Wholly Satisfactory	Satisfactory	Wholly Satisfactory
C	2.0		2.0	Satisfactory		Satisfactory
C-	1.7		*(Not Applicable)*	*(Not Applicable)*	*(Not Applicable)*	*(Not Applicable)*
D+	1.3	Pass	1.5	Barely Satisfactory	Marginal	Barely Adequate
D	1.0		1.0	Barely Adequate		Weak
F	0.0	Fail	0.0	Inadequate	Failure	Inadequate
I	*	Assessment to be completed (from 2005-06) / Incomplete not due to the fault of student (before 2005-06)				
L	*	Subject to be continued in the following semester				
M	*	Pass with Merit (from 2006-07)				
N	*	Assessment is not required				
P	*	Pass on an ungraded subject				
S	0.0	Absent from assessment				
U	*	Fail on an ungraded subject				

(* omitted in the calculation of all GPAs)
Grades with the following symbols denote disqualification of result due to:
academic dishonesty / non-compliance with examination regulations (before 2019-20)
% academic dishonesty (from 2019-20)
@ non-compliance with examination regulations (from 2019-20)

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學業成績表

3. GPA

GPA (cumulative)	The cumulative Grade Point Average is the average calculated for all subjects taken.
GPA for Major	For students taking a major/minor option, their award classifications will be based on the GPAs they obtained for both their major and minor studies.
GPA for Minor	The Grade Point Average for Minor takes into account subjects which are relevant to the student's minor studies.
GPA for Award	The Grade Point Average for Award is the final GPA value based on which the award classification of a student is determined.

All GPA values are capped at 4.00 before 2020-21. From 2020-21 onwards, all GPA values are not capped, and the highest GPA value is 4.30.

Grades obtained through credit transfer will also be taken into consideration in the GPA calculation.

Starting from the 2005-06 academic year, only the grade obtained in the final attempt of a retaken subject will be included in the calculation of the above GPAs. For some programmes, weightings may be applied in the calculation of the GPA for Award.

4. Credits Attained

The Credits Attained only take into consideration those credits which are relevant for contributing to the award being pursued by a student.

5. Medium of Instruction

English is the medium of instruction and is used for classes, written assignments and examinations unless special approval has been given to a subject due to its specific nature.

- End of Explanation -