

# Haemin Ryu | Curriculum Vitae

My vision is to improve human mobility experiences with emerging technology and by analyzing data to make more people access the novel world without barriers, regardless of impairments and age. My interests rest at the intersection of **Human-Computer Interaction (HCI)**, **Universal Design**, **Extended Reality**, and **Accessibility**.

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## Education

Mar. 2014–Feb. 2020 Dual Degree Program Scholar

Graduated Dec. 2019 **B. S. in Computer Science**

Purdue University, Fort Wayne, IN, USA

Honors: PFW Top 50 (Annually recognizes 50 students for outstanding work and extracurricular achievements)

Graduated Feb. 2020 **B. E. in Computer Science**

Seoul Women's University, Seoul, South Korea

Honors: Merit-based Scholar with Highest Distinction (Full-ride tuition granted for two semesters)

Summa Cum Laude (3 of 71 students, in the top 1-5% of the Computer Science Major class)

## Professional Experience

Jan. 2020–Present **Software Developer**

Cirrus ABS Corporation (MarketSnare)

- Delivered a local marketing web platform 'MarketSnare' that meets multi-location business needs with centralized management, localization, and customization for various regions.
- Developed web solutions with the MarketSnare software platforms using the Microsoft ASP.NET framework, C#, XML, XSLT, JSON, HTML/CSS/JS, API integrations, Database management, and Web Server Technologies.

## Research Experience

ongoing [2] **Menu interfaces to Avoid Disembodiment Situations in Virtual Reality**

Advisor: Dr. Beomjin Kim

- Analyze different menu styles to investigate the way to help improve menu interface design in Virtual Reality focused on the disembodiment issue.

2020 [1] **Improvement to Pix2Code using Fast.ai: Automatic Generation of GUI with a Model Classification**

Advisor: Dr. Venkata Inukollu

- Demonstrated that automated deep learning model classification using Fast.ai can improve the accuracy and speed of the Pix2Code GUI Generation.

## Selected Projects

Oct. 2021 [2] **PLUR: Online Platform for Physical Education Community for Individuals with Disabilities**

#Accessibility #Sports #Community

- Created a web app that uses local resources and crowdsourcing to make sports programs and facilities more accessible to individuals with disabilities.
- Developed scenarios for connecting differently abled children and young adults with verified local coaches, trainers, sports associations, and clubs to begin their journey in sports.

Aug. 2019–Apr. 2020 [1] **Indoor Navigation: Improved Accessibility for People with Disabilities**

#Accessibility #DataVisualization #Navigation #Hospital

- Leveraged hospital navigation data from beacon technology focused on the patient experience to provide a more accessible hospital visit experience for patients with disabilities.
- Designed a data analytics web application to discover heavy/light usage facilities and routes at the hospital and improved mobile application navigation to assist patients.
- Built a web interface that visualizes interactive data analytics and displays employee administration management systems using Angular 7, TypeScript, and HTML/CSS/JS.

## Awards & Honors

### Academic Conferences

- Oct. 2022* **Travel Award, ACM UIST Conference, USD 1,338**
- Feb. 2020* **Student Mentoring Workshop, IEEE/ACM ICSE Conference, USD 500**
- Oct. 2019* **Purdue Student Travel Fund Grant for IEEE/ACM ASE Conference, Purdue Global, USD 1,164.83**

### Scholastic Achievements

- Apr. 2020* **Student Research and Creative Endeavor Symposium – Poster, Purdue FW Research & Innovation**
- Apr. 2019* **Purdue Fort Wayne Top 50 Award, Purdue FW Top 50 Committee**
- 2018, 2019* **Dean's List & Semester Honors List, Purdue FW Engineering, Technology, and Computer Science**
- 2018, 2019* **Dual Degree Program Scholarship, SWU Division of International Affairs, 2-year Full-ride tuition**
- 2014, 2015* **Merit-based Scholarship, SWU College of Informatics & Media, 2-semester Full-ride tuition**

### Collaborative Project Team Achievements

- Oct. 2021* **Hack for Humanity – Top 7 Finalist of 59 worldwide competitors, Arizona State University**
- Feb. 2021* **Flipping Finance Challenge – 1<sup>st</sup> & 2<sup>nd</sup> Places of 120 participants, Indiana Bond Bank, USD 270**
- May. 2019* **Capstone Design Project Excellence Award – 2<sup>nd</sup> Place, Purdue FW Dept. of Computer Science**
- Nov. 2015* **Creative Idea Competition Award – 1<sup>st</sup> Place, SWU Creative Center, KRW 300,000 (USD 279)**
- Jul. 2015* **LIKELION Ideathon – Top 10 out of 110 projects with over 500 college students in Korea, LIKELION**

## Presentations

- Apr. 8th, 2022* **Ryu, H. (2022). UX Design for Web Developers. University of Illinois Web Conference, University of Illinois, Champaign, IL (Virtual). April 6–8, 2022.**
- Oct. 2019* **Ryu, H. (2019). Journey to Conference on Automated Software Engineering. Guest Lecture for CS 36000 Software Engineering, Purdue University, Fort Wayne, IN. October 2019.**

## Panels

- Dec. 7th, 2022* **Professional Panel, CS 46700 Project Management, Purdue University, Fort Wayne, IN. Department of Computer Science**
- Nov. 28th, 2022* **CS Mixer Event Alumni Panel, Purdue University, Fort Wayne, IN. Department of Computer Science**
- Apr. 15th, 2022* **Q & A with Alumni Panel, Purdue University, Fort Wayne, IN. College of Engineering, Technology & Computer Science**
- Apr. 12th, 2021* **ETCS Internship Panel, Purdue University, Fort Wayne, IN. College of Engineering, Technology & Computer Science**
- Nov. 20th, 2019* **"A Day in their Shoes" Simulation with Panel Discussion, Purdue University, Fort Wayne, IN. Office of International Education**

## Teaching Experience

### Teaching Assistant

- Fall 2018–Fall 2019* **CS 36000 Software Engineering**  
Venkata Inukollu, Ph.D. Assistant Professor; Department of Computer Science; Purdue University, Fort Wayne, IN
- Summer 2019* **CS 16000 Intro to Computer Science I (Java)**  
David Liu, Ph.D. Associate Professor; Department of Computer Science; Purdue University, Fort Wayne, IN

### Tutoring

- Fall 2018–Spring 2019* **Core Academic Skills Assessment (CASA), Analytic Geometry and Calculus I & II**
- Mar. 2016–Nov. 2016* **Play with Software – Programming education for elementary school students, NAVER Connect Fdn.**

## Volunteering & Extra Curricular

Academic Services - Student Volunteer

*Oct. 2022, 2021, 2020* **ACM UIST Conference**  
*May. 2021* **ACM CHI Conference**  
*Jul. 2020* **IEEE/ACM ICSE Conference**

UX/UI Design

*Aug. 2021–Mar. 2022* **Seed Fund Initiative Project**, United Nations SDSN Global Youth  
*Aug. 2021–Oct. 2021* **Lead Like a Girl Challenge Project for Young Women Leaders**, Go Laadli

Leadership

*Feb. 2020* **Site Organizer**, Global Game Jam Fort Wayne, Purdue University, Fort Wayne, IN. Department of Computer Science  
*2018–2019* **Association for Computing Machinery**, Purdue University, Fort Wayne, IN. Department of Computer Science  
*2018–2019* **Club Seoul Event Coordinator**, Purdue University, Fort Wayne, IN. International Student Organization  
*Apr. 2018, Apr. 2019* **The BIG Event: Student-led service project**, Purdue University, Fort Wayne, IN.  
*Summer 2018* **New Student Orientation Program Assistant**, Purdue University, Fort Wayne, IN. Department of Computer Science  
*Spring 2014–Fall 2014* **Student Council**, Seoul Women's University, Seoul, South Korea. Department of Computer Science  
*Sep, 2014– Dec. 2014* **Young Lab Marketing**, Samsung Card, Seoul, South Korea.

Other Services

*Nov. 2017* **Volunteer**, Coal Briquettes for Neighbors in Korea  
*Jun. 2017* **Volunteer**, Dongan Intellectual and Developmental Disabilities Retreat  
*Jul. 2017–Aug. 2017* **'I'm your PEN' Translator**, Good Neighbors  
*Jun, 2014– Oct. 2014* **Seismic Outreach Volunteer**, Into Dreams and People Youth Overseas Volunteer Group, the Ministry of Gender Equality and Family of Korea, Korea Youth Work Agency, and Korea Rotary Youth Association