



JIAYAO YU

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I design human-computer interactions by design-thinking, prototyping and computational optimisations. I am a life-long learner, self-initiator, and team-player.

EDUCATION

Oct 2018
Aug 2016

Human-Computer Interaction Design M.Sc.

KTH Royal Institute of Technology | Stockholm, Sweden
Aalto University | Espoo, Finland

Aalto Dean Incentive scholarship; GPA 4.0/5.0
Thesis: *Gaze-typing for Everyday Use* (A grade - excellent)
Computational UI Design, Physical Interaction Design, Usability Evaluation
Minor in Innovation & Entrepreneurship with European Institute of Innovation and Technology

Aug 2016
Sept 2012

Electronic Information Engineering B.Eng.

Communication University of China | Beijing, China

Thesis: *Interaction Design in Augmented Reality on the Smartphone*
Multimedia Technology, Embedded Systems, Electronics
Outstanding association leader as magazine *Media Youth* chief-editor (2% of campus)

EXPERIENCE

Present
Jun 2020
&
Sept 2019
May 2019

Data Engineer & Data Analytics Intern

Ericsson R&D | Stockholm, Sweden

Data pipeline construction to optimise radio software CI/CD
Implemented ETL data pipelines from Gerrit and MongoDB through Kafka to Elasticsearch by micro-services, provided data lake and support to downstream CI/CD projects.
Hardware clustering
Clustered hardwares by PCA, Random Forests to improve the cost-efficiency in radio testing process. Prototyped the clustering algorithms using Python, Scikit. Presented data findings to managers and developers, and assisted to integrate the prototype into production.
Worked as a scrum master of a 7-people team, coordinated with product owners.

Apr 2020
Nov 2019

UX Design Consultant

Semcon | Linköping, Sweden

Worked on-site with a product development team to develop an iOS mobile app using Swift.
Assisted in consultancy sales to regional customer companies.

Dec 2018
Jul 2018

UI & UX Design Consultant

Callstats.io | Helsinki, Finland

Independently designed UI & UX of complete views on a data-intensive web dashboard to facilitate the decision-making for customer companies in building WebRTC infrastructure.
Presented and justified designs to product managers, front-end developers and marketing teams.

Jun 2018
Feb 2018

Master Thesis Worker

Tobii Dynavox | Stockholm, Sweden

Researched on an on-screen keyboard using gaze as input for users with speech & motor impairments. Prototyped the keyboard as a desktop app using C#/.NET/WPF and MVVM pattern.
Evaluated different keyboards by quantitative typing performance metrics and recommended design decisions by data findings to product team.

Aug 2017
May 2017

Research Assistant

User Interfaces Research Group | Espoo, Finland

Developed interactive teaching tutorials for a Bachelor's course on human perception, cognition, and motor control theories using Jupyter Notebook with tkinter GUI library.
Supervised by prof. Antti Oulasvirta

PUBLICATIONS

- 2018 **Jiayao Yu. Gaze-typing for Everyday Use: Keyboard Usability Observations and a “Tolerant” Keyboard Prototype, Master’s Thesis**
- 2018 Nicolaas Bijman, **Jiayao Yu**, André Josefsson, Jim Tolman. *Interactive Event Map*, **ACM TEI 2018 Student Design Challenge**
- 2016 **Jiayao Yu. Interaction Design in Augmented Reality on the Smartphone**, CISP-BMEI 2016: 1317-1321, **Bachelor’s Thesis**

PROJECTS

- 2020 **RoadKill Worker** | *Linköping, Sweden*
a first-person PC game prototyped at a game hackathon over a weekend. 3D-modelled game assets using Maya, designed game UIs using Figma. Worked with a team of visual artists, game developers and sound creators.
- 2019 **Gaze-typing Keyboard for Everyday Use** | *Stockholm, Sweden*
Usability evaluation of existing on-screen gaze-typing keyboards by quantitative typing performance metrics. A shape-writing-based keyboard prototyped as a desktop app using C#/.NET/WPF and MVVM pattern.
- 2019 **HackZurich** | *Zurich, Switzerland*
an app identifying Hackathon participants by facial recognition. Designed app UI&UX using Figma and prototyped the front-end using ReactJS.
- 2018 **EventMap** | *Stockholm, Sweden*
an interactive installation in public space visualising upcoming city events for tourists. Designed interactions and prototyped using Arduino and Raspberry Pi. Exhibited the project in ACM TEI 2018 Student Design Challenge.
- 2021 **Coursera Deep Learning specialisation**
online self-paced education on Supervised & Unsupervised Learning, Neural Network, Convolutional Neural Network and Sequence Models. Implemented the algorithms in Matlab and Python.

SKILLS

Engineering	Design	Platform	Language
Python	Sketch, Figma	Unity3d	English (<i>fluent</i>)
Matlab	InVision	Oculus	Chinese (<i>native</i>)
C#, .NET&WPF	Adobe Photoshop	Tobii EyeX	Swedish (<i>conversational</i>)
C, C++	Adobe Premiere	Kinect	Finnish (<i>limited</i>)
Html&css, ReactJS	3DsMax, Rhinoceros	Electronics	

ACTIVITIES

- Jun 2021
Jul 2019 **Marketing & Communications Officer** | *Europe*
Worked for EIT Digital Alumni Foundation, a EU-supported alumni community of 2k+ members, built marketing strategies, designed branding assets, managed communication channels targeting at international audience in the domain of digital technology.
- 2015 **One for Old Project Lead** | *Beijing, China*
Led a team of ~10 people to develop an NGO project improving the wellbeing of the elderly. Edited interview articles and marketing videos to gain social attention. Pitched the project to local governmental associations, and won support and funding.

