

# Hanbing Wang

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## EDUCATION

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**Shandong University** - Bachelor of Science in Communication

Sep 2019 - Jun 2023

- **IELTS: 7.5**, GPA: 3.7/5.0 | Relevant Courses: **Pattern Recognition, Machine Learning and Deep Learning(95 #1st)**, Advanced Mathematics, Probability Theory, Linear Algebra
- Honors/Awards:
  - First Prize Scholarships in Research Innovation and Aesthetic Education Accomplishment(Top 3%)
  - Second prize in Mathematical Contest in Modeling of Shandong University.
  - Third Prize in National Mathematical Contest in Modeling
  - Third Prize in National Undergraduate Electronic Design Contest
  - Third Prize in 2021 National English Competition for College Students

## RESEARCH EXPERIENCE

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- Hold **three patents**.
- **Two papers** were submitted to EI Compendex.
- Submitted a paper - **On the User Behavior Leakage from Recommender System Exposure** (XIN XIN, JIYUAN YANG, HANBING WANG, PENGJIE REN, ZHAOCHUN REN) as **second author** to TOIS (**Minor**), which investigates the problem of **user privacy leakage** in recommender system (sequential recommendation). We point out a **new privacy disclosure risk** in RecSys, and propose an **attack model** as well as a **protection mechanism**.
- Two papers on going
  - One is concerning **multi-behavior recommendation** (WWW2023). We invented a framework which can denoise implicit feedback and transfer knowledge learned under clean data of different behaviors (e.g. page view, add-to-favourite) to assist the learning of each other.
  - The other is focusing on mitigating **fairness/bias** issues in **graph-based recommendations** (SIGIR2023). We are trying to invent an **adaptive debiasing** method through learning **personalized** parameters via **multi-task learning, graph augmentation** and **reinforcement learning**.

## PROJECT EXPERIENCE

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**A full stack driverless assistant system based on Huawei Ascend (Embedded system, Edge computing, Computer vision)**

Jul 2021 - Dec 2021

- Invent a **standalone detection system** which can detect road lane information and show it on a website in **real time**.
- Involve the use of Atlas 200DK, Raspberry Pi, Zynq, and 3D-printing.

**A real time image style transfer system (Computer engineering, Computer vision)**

Aug 2021 - Nov 2021

- Invent a real time **style transfer system** which can transfer the image/video style captured by a camera (e.g. mobile phone's) and display the results on a webpage in **real time**.
- Developed a **computer application** which can achieve style transfer as long as you download our app.

## INTERNSHIP EXPERIENCE

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**Research Assistant** - Information Retrieval Lab, Shandong University

May 2021 - Present

I contribute to many laboratory projects and responsible for organizing academic seminar for RAs.

## MISCELLANEOUS

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- **Skills:** Python/C/Java, Springboot/React/Html, PR/PS
- **Languages:** English (IELTS: 7.5), Mandarin Chinese (Native)
- **Interests:** Piano (Gr. 10), Electronic Organ (Gr. 10), Badminton (SDU No.5 Men's Team )