XUEMING XU

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EDUCATION

Shanghai Jiao Tong University

August 2021

Bachelor Degree in Electrical & Computer Engineering

Overall GPA: 3.76/4.0

University of Michigan, Ann Arbor

May 2021

Bachelor Degree in Computer Science

Overall GPA: 4.0/4.0

PROJECT EXPERIENCE

Temperature Field Reconstruction of a Boiler Furnace Based on Acoustic Tomography (Matlab)

Undergraduate Research Program

May 2019 - Present Group Member

- · Transform the problem mathematically and research on the reconstruction algorithms
- · Apply truncated singular value method, Tikhonov regression, algebraic reconstruction method and Gaussian Process Regression to solve the transformed problem
- · Visualize the reconstructed temperature field

Wearable Bluetooth Device Development (JAVA)

Undergraduate Research Program

 $May\ 2019$ - $Sept\ 2019$

Group Member

- · Build a pee-detection Bluetooth device designed for babies
- · Develop an Android application for parents monitoring

Airline(Network) Revenue Management (Python)

May 2019 - August 2019

In-class Project

- · Mathematically modelled the airline revenue management problem as a multi-armed bandit problem
- \cdot Designed an algorithm for reduced fully-informed problem with fluid approximation and convex optimization
- · Furthered the algorithm to uninformed problem using constrained UCB and TS
- · Analyzed corresponding regret for the above algorithms

AWARDS & HONOURS

Bronze Medal Winner in The 2018 University Physics Competition

Undergraduate Excellent Scholarship of Shanghai Jiao Tong University

Outstanding Volunteer of SK Sunny Young Volunteer Group

Outstanding Officer of UM-SJTU Joint Institute Student Union

June 2018

John Wu&Jane Sun Talent Scholarship of Shanghai Jiao Tong University

September 2017

SKILLS

Languages Chinese, English

Programming Matlab, Python, C++, Java