Xi Yu

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EDUCATION

Portland State University (PSU) GPA: 3.43/4   09/2018-12/2021
- M.S. of Computer Science
- Independent Research in cognitive wireless networks   advisor: Prof.Nirupama Bulusu

Liaoning Normal University (LNNU) GPA:91/100   09/2015-06/2018
- Master of Management in Management Science and Engineering   advisor: Prof. Weilian Xue
- President of Information Department of LNNU Graduates' Union

Dalian University of Technology (exchange experience)   01/2017-01/2018
- Major: Computer Science and Technology (Lab for Ph.D.)   advisor: Prof. Heng Qi

Shenyang Ligong University (SLU) GPA: 3.25/4   09/2010-06/2014
- Bachelor of Management in Information Management and Information Systems

SKILLS

C, C++, C#, Matlab, Python, Scala, Java, SQL, Script, JavaScript, CSS, HTML, MS Office, LaTex, GitHub, WireShark, PhotoShop, Coreldraw, MS Visio, Linux, curl

CERTIFICATION

Udemy Product Manager Certificate   06/23/2023

EXPERIENCE

Software developer | Spruce Box Construction Inc. (Hybrid, Portland, OR)   09/2022-present
- Collaborated on stages of systems development lifecycle from requirement gathering to production releases
- Collaborate dwith project managers to select ambitious, but realistic coding milestones on pre-release software project development
- Participated in architecture, design and implementation of back-end features using C#, and wrote script

Teaching/Research Assistant | Computer Science department at Portland State University (Portland,OR)   09/2018-12/2021
- Posted tutor session, evaluated and grade examinations, assignments to improve average score
- Attended seminars and symposiums to improve overall knowledge and understanding
- Worked both independently and collaboratively in fast-paced laboratory environment
- Gathered, arranged, and corrected research data to create representative graphs and carts highlighting results for presentations
- Performed statistical, qualitative, and quantitative analysis
- Collected research data through experimentation, surveys and leading focus groups

Lead Art Editor & Retail Represent | AsusTek Computer Inc. (Shenyang, China, PRC)   11/2010 - 06/2012
- Conducted market analysis among ASUS computer retailers in Shenyang
- Responsible for online management of ASUS forum and offline promotion for our products
- Conducted brand marketing and sold our products in a retailer during summer vacation
- Conducted market research to survey how many people will recommend ASUS mainboard and graphics card to others

PROJECTS

Sensor Test-bed / Mobile Health
- Work on a contactless sleep-monitoring device on Arduino with PIR motion sensor, photoelectric sensor etc.
- Monitor human body movement, visible light CO_2 density, display data visualization on website
- Work on Arduino IDE and programming in C, setup the breadboard with sensors and jumper wires

Systems and Networks
- Upgrade server with multi-threads processing to reduce systems burden on server
- Implement the package sending with curl on clients side and write Script for testing

- Simulate different mathematical modeling(e.g. Monte Carlo) in sector sweep in mmWave initial access
- Build and simulate multi-objects optimization on cognitive radio networks

ML

- Train the data under both supervised and unsupervised learning and show results with Numpy
- Build and train networks of perceptrons with linear activation functions
- Work on back-propagation in multi-layers neural network
- Compare the prediction accuracy: mean absolute error (MAE) between decision trees, SVMs, logistic regression and KNN, from the outcome, discuss which model is optimal for the problem define, compare the advantage and disadvantages of these methodologies.

AI

- Do reinforce learning (Compare Q-learning and double Q-learning) with OpenAI Gym on PoleCart problem
- Implement the Q-learning, A* search, genetic algorithm, Monte Carlo search and simulated annealing
- Implement ant colony algorithms and simulate for the best index in a model

AR/ VR/ XR/ Computer Graphic / Multimedia

- Deploy Vuforia Engine AR package on Unity, add the Vuforia Camera and Vuforia marker
- Build a simple image editing tool includes dithering, sampling, filtering and composition with FLTK library
- Create a virtual amusement park with OpenGL, do texture mapping and parametric instancing
- Work on a image compression tool

VOLUNTEER

SKY Breathwork & Meditation at PSU REC Center   06/2020-present
- Community building and support, event support, usher, escort

Mentor Program and Scholarship Program | Portland Women In Tech (PDXWIT)   07/2022-present
- Enhance the professional development of women in technology by building trust and creating partnerships in the Portland community, Helped no-tech background mentees to transform to tech related roles
- Review scholarship applications, give comments and feedback for improvement to community members

HONORS & AWARDS

IEEE Pervasive Computing and Communications 2021 NSF Participation grants for US-based students   03/2021

PUBLICATIONS

Suresh Srinivasan, **Xi Yu**, A. Keshavarz-Haddad, Ehsan Aryafar, "**Fair Initial Access Design for mmWave Wireless**", *The International Conference on Network Protocols (IEEE ICNP 2020)*   10/10/2019
Xi Yu, Weilian Xue, "**Joint Spectrum Allocation and Power Control for Cognitive Radio Networks Based on Potential Game**", *The International Symposium on Networks, Computers and Communications(IEEE ISNCC 2018)*   04/01/2018