

## **Vishnu K. Chhabra**

612-500-6474 | vishnu.kabirc@gmail.com | linkedin/vishnu-chhabra1999

### **EDUCATION**

#### **The Ohio State University, Columbus, OH**

PhD in Computer Science and Engineering, Artificial Intelligence Major

(May 2026)

Overall GPA: 3.737

#### **University of Minnesota- Twin Cities, Minneapolis, MN**

B.A in Mathematics and Computer Science

(May 2022)

Overall GPA: 3.404

### **WORK EXPERIENCE**

#### **Software Development Intern (Java), Scriptulate**

(May 2021 – Aug 2021)

- Developed Java objects for efficient data storage; working directly under Chief Technical Officer of a software startup
- Performed various forms of statistical analysis on data using an assortment of Java Libraries
- Interpreted data to provide clients with an overview of the analysis and findings

#### **Teaching Assistant, Department of CSE, University of Minnesota**

(Sept 2020 – May 2022)

- Worked with a team of TAs to efficiently teach Java & OCaml to undergraduates in times of a global pandemic
- Created grading scheme for homework, quizzes, projects, exams; developed project assignments and built solutions
- Debugged student code and assisted in teaching them to write clean and concise code

#### **Graduate Research Associate, Department of CSE, The Ohio State University**

(May 2022 – Present)

- Applying Machine Learning in the field of Wireless Networking
- Performed and tested various methods for improving cross band channel predictions in MIMO systems
- Testing and expanding models using PyTorch and Tensorflow

### **QUALIFICATIONS**

- Expertise in Python, PyTorch, Keras, Tensorflow, Java, Azure, SQL, NoSQL, MapReduce
- Proficiency in Machine Learning, Statistics, Deep Learning, Reinforcement Learning, Recommender Systems, Pattern Recognition and Natural Language Processing(NLP)
- Experience working in a creative startup, research and industrial setting

### **RESEARCH EXPERIENCE**

**Multi-Objective Personalization in Multi-Stakeholder Organizational Bulk E-mail: A Field Experiment** - Accepted in ACM

**On Earth Movers Distance: Applications and Utility**

**Recommendation Framework based on Deep Reinforcement Learning(DRR) on News Data**

**Cross Band Channel Predictions Utilizing Machine Learning** – Current Research

**Analysis of Deep Learning & Machine Learning models for movie recommendations**

**Automated Trading With FINRL: A Study Of Deep Reinforcement Learning In Quantitative Finance**

### **ENGINEERING PROJECTS**

#### **UMN Small Satellite Team – Funded by NASA and USA Air Force**

- Worked in the communications team using C/C++ to setup and secure communication systems for the Satellites

#### **MNQuants**

- Led a team in a student organization which automated trading using PCA and CNNs to model currency prices
- Implemented Genetic Algorithms to provide valuable trading signals which increased expected returns

#### **Minnehack 2020**

- Designed a progressive web app to reduce opioids related deaths/addictions using NodeJS/React and Python
- Applied Google Maps API to assess the locations of signals

#### **Algorithmic Trading**

- Applied Deep Reinforcement Learning models, Back tested and implemented the models and signals in a live trading environment
- Used NLP to conduct sentiment analysis for refining models