

Teaching Statement

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Introduction

I am an enthusiastic and committed researcher in pursuit of a faculty role. My teaching focus is to engage students in a highly interactive learning environment, promoting critical thinking and respecting their opinions and backgrounds.

Teaching Interest

I am highly interested in teaching courses in the areas of computer networks, wireless communication, signal processing, and machine learning, including but not limited to:

- Data communication and Computer Networks
- Digital/Wireless Communication
- Signal Processing and Computer Vision
- Machine Learning and Deep Learning

My Teaching Philosophy

I believe that effective teaching should inspire curiosity, encourage critical thinking, and develop problem-solving skills. My approach to teaching is student-centered, focusing on active learning and the application of knowledge to real-world problems.

As a teacher, I believe that my role is to equip students with the skills to solve real-world problems and that it is important to design content with this in mind. I think it is important to be aware that students may be at different intellectual stages and will not all learn similarly. Therefore, I strongly advocate “learning by doing” approaches supplementing classes and lectures. In my experience, students engaged in active inquiry can internalize concepts quickly. While fundamentals can be effectively covered in classes and through homework assignments, I think practical class projects encourage students to think creatively about the topics at hand. Appropriate forms of evaluating student progress are required with such an approach. For instance, exams, reports, and presentations need to be designed to capture a student’s problem-solving ability and creative thinking. I am excited about engaging with undergraduate and graduate students and developing and tailoring teaching content to their needs.

I strive to create a classroom atmosphere where students feel respected, valued, and motivated to learn.

Relevant Experience

While my formal teaching experience is not vast, I have had several opportunities to engage in teaching, mentoring, and educational activities that have shaped my teaching approach:

- University Teaching:** I have taught two graduate courses to students majoring in statistics. The lectures are delivered virtually, which enhanced my experience of engaging with students remotely, and helped me understand the benefits and limitations of virtual platforms as compared to classroom teaching.
- Guest Lectures:** I have delivered guest lectures on 6G networks in graduate courses. These experiences have honed my ability to communicate complex concepts clearly and effectively.
- Conference Tutorials and Talks:** I have delivered several tutorials and talks at international conferences. The tutorials were especially helpful in fostering a collaborative learning environment where participants can engage in hands-on activities and discussions.
- Mentorship:** I have co-supervised an M.Phil student, and mentored several undergraduate and graduate students in research projects and internships. This mentorship has reinforced the importance of individualized instruction and support.

Teaching Strategies

Looking forward, I am eager to expand my teaching portfolio and implement the following strategies to enhance student learning:

- (i) **Active Learning:** I plan to incorporate active learning techniques, such as problem-based learning, group assignments, and interactive quizzes, to engage students and promote a deeper understanding of the topic.
- (ii) **Inclusive Teaching:** I am committed to creating an inclusive classroom environment that accommodates diverse learning styles and backgrounds. I believe it is my role as a teacher and mentor to adapt to students' needs. I learned from my experience, the importance of clear instructions and simple metaphors in teaching, to ensure all students can follow and have the opportunity to succeed.
- (iii) **Real-World Applications:** I aim to connect theoretical concepts to real-world applications by incorporating case studies, industry applications, and practical projects into the curriculum. This approach will help students see the relevance of their studies and prepare them for their future careers.
- (iv) **Continuous Improvement:** As an educator, I am dedicated to continuous improvement. I will seek feedback from students and colleagues, attend professional development workshops, and stay current with educational research to refine my teaching practices.
- (v) **Students' Evaluation** Student evaluations are a crucial component of my teaching practice, providing valuable insights into the effectiveness of my instructional methods and the overall learning experience. I understand the recent challenges of the increasing use of generative AI tools and I believe that it is extremely important for me to devise suitable assessment techniques, collaborative projects, and continuous assessment, etc.

Conclusion

My teaching philosophy is centered on fostering a collaborative, inclusive, and engaging learning environment. While my formal teaching experience is limited, my commitment to education, my interdisciplinary mindset, and the skills I have developed through various educational activities position me to be an effective and impactful teacher.

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