Yu-Ming Chen, M.D.

Fellow in Child and Adolescent Psychiatry, Taipei Veterans General Hospital, Taipei, Taiwan
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RESEARCH INTERESTS

I am a board-certified psychiatrist with a foundation in mathematics and computer science, dedicated to advancing psychiatric assessments and interventions through AI research. My research focuses on leveraging diverse data modalities—including text, speech, visual behavioral data, and bioimaging—to develop AI models that enable precision psychiatry and personalized interventions. My ultimate goal is to establish a translational research pipeline that seamlessly integrates AI into clinical practice, prioritizing human-centered approaches with a focus on real-world safety, efficacy, and scalability.

EDUCATION

Kaohsiung Medical University, Kaohsiung, Taiwan   Sep 2008 – Jun 2015
Doctor of Medicine

National Taiwan University, Taipei, Taiwan   Sep 2016 – Jun 2024
Bachelor of Science and Engineering
Specialization: Combined Major in Mathematics and Computer Science   Cumulative GPA: 4.26/4.30

PROFESSIONAL CERTIFICATION

Board Certification in Psychiatry, Taiwan Board of Psychiatry   Certified 2024

PROFESSIONAL EDUCATION

Taipei Veterans General Hospital, Taipei, Taiwan
Fellow in Child and Adolescent Psychiatry   Aug 2024 – Present

- Assessing and managing children and adolescents with neurodevelopmental disorders, psychotic disorders, mood disorders, and anxiety disorders.
- Developing individualized treatment plans, including pharmacological management, psychotherapy, and social skills interventions.
- Collaborating with multidisciplinary teams, including psychologists, occupational therapists, social workers, and nursing staff, to ensure holistic care.
- Conducting family therapy sessions and providing psychoeducation to caregivers on social and emotional challenges.
- Supervising and mentoring psychiatric residents in child and adolescent psychiatry.

Psychiatry Resident   Aug 2020 – Jul 2024

- Conducted comprehensive psychiatric evaluations for patients across diverse age groups with various psychiatric conditions, including mood disorders, psychotic disorders, substance use disorders, and neurocognitive disorders.
- Managed inpatient and outpatient psychiatric care by developing individualized treatment plans, including pharmacological management and psychotherapy.
- Participated in crisis intervention, including suicide risk assessment, management of acute psychosis, and emergency psychiatric care.
- Collaborated with multidisciplinary teams to provide integrated care, involving social workers, psychologists, occupational therapists, and nursing staff.

Kaohsiung Medical University Hospital, Kaohsiung, Taiwan
Postgraduate Resident   Aug 2016 – Jul 2017
National Taiwan University Hospital, Taipei, Taiwan
Intern   Jun 2014 – May 2015

PUBLICATIONS

Conference Papers

- **Under Review**. Xin-Yu Chen (co-first author), **Yu-Ming Chen (co-first author)**, Chin-Po Chen, Bo-Hao Su, Susan Shur-Fen Gau, and Chi-Chun Lee. *SocialRecNet: A Multimodal LLM-Based Framework for Assessing Social Reciprocity in Autism Spectrum Disorder*.

RESEARCH PROJECT

Exploratory Multimodal Autism Assessment Using Large Language Models   Apr 2024 – Sep 2024

- **Role:** Collaborative researcher on a project led by Prof. Chi-Chun Lee at National Tsing Hua University, affiliated with Taipei Veterans General Hospital and supervised by Dr. Mu-Hong Chen, Chief of Child and Adolescent Psychiatry.
- **Project Overview:** Explored the LLMs' potential in evaluating autism from dialogue recordings and transcripts of the Autism Diagnostic Observation Schedule (ADOS), a standardized tool used by clinical experts to assess social interactions across multiple dimensions through various ADOS coding items.
- **Key Contributions:**
    - Literature Survey: Conducted an extensive literature survey to propose and design the model architecture by integrating prosodic-acoustic entrainment concepts with a multimodal large language model framework.
    - Selected and mapped key ADOS coding items to serve as reliable labels, ensuring clinical relevance and consistency in the analysis.
    - Participated in the prompt design, investigating various prompt structures and formulations to optimize model performance.
    - Analyzed experimental results from computational and clinical perspectives, iteratively refining the model to better replicate human interaction dynamics.

COMMUNITY SERVICE PROJECT

Healthcare and Education for Eastern Taiwan's Coastal Communities   Feb 2014 – June 2014

- **Role:** Project Lead and Founder
- **Project Overview:** Led a comprehensive community service initiative to enhance healthcare and educational resources in Eastern Taiwan's coastal regions. The project involved medical assistance, educational tutoring for children, and community engagement with local organizations and institutions.
- **Key Contributions:**
    - **Healthcare Support:** Provided medical care and support services at local nursing and healing centers.
    - **Educational Outreach:** Participated in educational programs, including tutoring and consulting sessions, and facilitated art therapy workshops to promote academic growth, creativity, and mental health for children in under-served communities.
    - **Community Engagement:** Partnered with local organizations and institutions to develop and implement sustainable community-based initiatives addressing healthcare and educational needs.

AWARDS

Dean's Award, College of Science, National Taiwan University	May 2024
Best Chief Resident Award, Department of Psychiatry, Taipei Veterans General Hospital	Jul 2024
Best Intern Award, National Taiwan University Hospital	May 2015
Dean's Award, School of Medicine, Kaohsiung Medical University	May 2015
Community Service Project Award, Ministry of Education, Taiwan	Oct 2014