

JIAJUN (CARSON) CHEN

jic4015@med.cornell.edu | bettercallcarson.com | [linkedin.com/in/BetterCallCarson](https://www.linkedin.com/in/BetterCallCarson) | U.S. Permanent Resident

EDUCATION

Weill Cornell Graduate School of Medical Sciences, New York, NY M.S., Health Informatics and Artificial Intelligence	Sep 2026 – Aug 2027 (Expected)
Stanford University, Graduate School of Business, Stanford, CA Stanford LEAD Executive Education Program Non-degree	Aug 2023 – Aug 2024
Carnegie Mellon University, School of Computer Science, Pittsburgh, PA M.S., Information Technology – eBusiness Technology GPA: 3.82/4.00	Aug 2017 – Aug 2018
University of Miami, Coral Gables, FL B.S., Computer Science; Additional Major in Mathematics–Statistics	Sep 2010 – May 2015

RESEARCH INTERESTS

Human-centered AI for patients and family caregivers; AI-supported care coordination and home-to-clinic information workflows; trustworthy digital health systems and real-world evaluation.

RESEARCH EXPERIENCE

Weill Cornell Medicine, Division of Geriatrics and Palliative Medicine, New York, NY Center on Aging and Behavioral Research Research & Technical Consultant (WCM Affiliate) <i>PIs: Sara J. Czaja, PhD; Walter R. Boot, PhD</i>	Jun 2024 – Present
Usability and Individual Differences Across Two Generations of PRISM and a Standard Tablet First-Author Secondary Analysis	Jul 2026 – Present
- Lead a comparative secondary analysis of usability across two generations of Personal Reminder Information and Social Management (PRISM) and a standard-tablet condition, examining both overall usability patterns and individual differences across platforms. - Developed the research questions and analysis plan for cross-generation and standard-tablet comparisons, including analyses of participant characteristics associated with usability and technology experience. - Lead manuscript development and contribute to harmonizing measures across datasets, statistical analysis, interpretation of findings, and preparation for publication.	
Caregiver-Facing Artificial Intelligence for Advocacy and Care Coordination in Alzheimer's Disease and Related Dementias: A Scoping Review Scoping Review Co-Lead	Jul 2026 – Present
- Co-developed the research questions, scope, eligibility criteria, and evidence framework for caregiver-facing artificial intelligence supporting information work, service navigation, provider communication, follow-through, and advocacy in Alzheimer's disease and related dementias (ADRD). - Designed the review workflow in accordance with JBI and PRISMA-ScR guidance, including librarian-reviewed searches across health and computing databases, dual independent screening, structured evidence charting, and protocol registration. - Developed a task-to-capability framework linking caregiver work to AI capabilities, evidence maturity, workflow integration, outcomes, and implementation/ethical considerations.	
Supporting Personal Activities and Reinforcing Cognition (SPARC) NIH/NIA-funded CREATE Project, P01 AG073090	Nov 2024 – Present
- Lead end-to-end technical implementation of a tablet-based intervention for older adults with mild cognitive impairment and other cognitive challenges, translating investigator requirements into a field-ready participant platform. - Built the Android application and research backend, including interest- and usage-based personalization, researcher-managed content, study scheduling, synchronization, and secure longitudinal capture of interaction, feature-use, and audio data. - Delivered the platform from requirements through field deployment and now support ongoing study operations, instrumentation, and iterative refinement as participant data are collected.	
Pennsylvania Aging Connect Program (PAAC), PEACE Initiative Community Technology Program	Jan 2025 – Present
- Lead technical design, development, deployment, and maintenance of a tablet-based community technology program supporting older adults in Northeastern Pennsylvania. - Translated stakeholder requirements into an accessible Android and backend platform spanning communication, scheduling, social engagement, health/community resources, learning, games, internet access, and participant support. - Deployed secure WCM-hosted infrastructure with time-stamped system- and feature-level usage instrumentation and continue supporting field operations and longitudinal data collection.	

University of Miami Miller School of Medicine, Miami, FL
Center on Aging, Department of Psychiatry | Full Stack Software Engineer
PI: Sara J. Czaja, PhD; Walter R. Boot, PhD

Oct 2015 – Jun 2017

Personal Reminder Information and Social Management 2.0 (PRISM 2.0)

NIH/NIA-funded aging and technology research project

- Designed and developed a bilingual Android platform for older adults, expanding functionality from 7 to 13 features and supporting deployment across approximately 300 tablets in a multi-site research program.
- Built Django REST services, participant-specific content infrastructure, and automated research data capture, reducing missing system-usage data from approximately 1.5% in the prior platform to 0%; stabilized the Functional Task Suite from approximately 25% crashes to 0%.
- Led a five-person development team and coordinated implementation with investigators and collaborators at the University of Miami, Florida State University, Georgia Institute of Technology, and AT&T; the platform was later used in the randomized field trial reported by Czaja et al. in *Innovation in Aging* (2024).

University of Miami, Coral Gables, FL

May 2015 – Oct 2015

Department of Psychology | Full-Time Research Assistant

PI: Daryl B. Greenfield, PhD

- Automated data processing and analysis workflows for early-childhood research, reducing recurring work from approximately two weeks to about five minutes; also coded classroom video using the Classroom Assessment Scoring System (CLASS) and supported technology-enabled assessment workflows.

INDUSTRY EXPERIENCE

Zoom Video Communications, San Jose, CA

Oct 2018 – Jul 2025

Software Engineer → Senior Software Engineer → Engineering Manager → Senior Engineering Manager

- Led healthcare-facing SDK integrations with Oracle Cerner, Current Health, and Intuitive Surgical, adapting Zoom platform capabilities for embedded virtual care, Hospital at Home, surgical/telecollaboration, and other specialized medical workflows.
- Scaled and led a hybrid engineering organization to 30 engineers across seven platforms; delivered SDK capabilities for Zoom for Broadcast and contributed to Zoom's 2025 Engineering, Science & Technology Emmy® Award.
- Built and launched the Video SDK product line, driving 83.1% quarter-over-quarter growth; drove adoption of shared SDK infrastructure across 30+ teams and modularized the client architecture to reduce integration effort by 40%.

PUBLICATIONS

Working Papers

- **Chen, J.**, Lin, X., & Moxley, J. H. "Usability and Individual Differences Across Two Generations of PRISM and a Standard Tablet"
- **Chen, J.**, & Wang, Z. "Caregiver-Facing Artificial Intelligence for Advocacy and Care Coordination in Alzheimer's Disease and Related Dementias: A Scoping Review"
- **Chen, J.**, & Peng, Y. "Evaluating Patient-Conditioned Prompting for Medical Text Simplification"
- Xiao, Y., Wright, D., & **Chen, J.** "Digital Interventions for Screen Addictions and Mental Health in Youth: A Systematic Review and Meta-Analysis"

SELECTED AWARDS & INTELLECTUAL PROPERTY

- **Engineering, Science & Technology Emmy® Award contributor** — Zoom for Broadcast, 2025

- U.S. Patent Application: Prompt-based Execution of Actions in a Communication Platform — filed Apr 30, 2024

TECHNICAL & RESEARCH SKILLS

- **Research Methods & Evaluation:** Human-centered and contextual design; requirements elicitation; usability research; secondary and longitudinal data analysis; repeated-measures and mixed-effects analysis; cross-study measure harmonization; evidence synthesis and scoping/systematic review methodology; human-subjects research (CITI Biomedical/Social-Behavioral; GCP).
- **AI & Intelligent Systems:** Large language models (LLMs); prompt and context engineering; structured generation; agentic workflows and tool use; retrieval-augmented generation (RAG); LLM orchestration and evaluation harnesses; model evaluation and benchmarking.
- **Research Software & Digital Health Systems:** Full-stack and cross-platform development across Android, iOS, web, and backend systems; participant-facing research platforms; research instrumentation and longitudinal data capture; secure APIs and cloud deployment; healthcare and medical-device platform integration.
- **Data & Computational Tools:** Python; Java/Kotlin; JavaScript/TypeScript; SQL; data processing and analysis; relational and NoSQL data systems; cloud and containerized computing.