

Kai Pandit

✉ kaipandit1@gmail.com 📞 7323977351 📍 New Brunswick, NJ 🌐 LinkedIn 🇺🇸 US Citizen 📁 Portfolio

EDUCATION

Master of Science - Computer Science December 2024 – May 2026
University of Texas at Austin

Bachelor of Arts - Computer Science September 2021 – December 2024
Rutgers University - New Brunswick | GPA: 3.5
Coursework: Systems Programming, Quantum Computing, Cognition, Data Structures, Computer Architecture, Data to Manuscript in R, Honors College Innovation Lab, Computational Robotics, Algorithms

EXPERIENCE

Service Design Intern May 2024 – August 2024
Electronic Arts Redwood Shores, California

- Owned and published 100 pages of design system documentation for EA Help, incorporating 150 assets, detailed anatomy, patterns, styling, code snippets, and content guidelines within Figma and Storybook.
- Developed The Experience Atlas' Creation and Update Portal (TEACUP). Facilitated a workshop with content and publishing teams to define the architecture of The Experience Atlas.
- Managed, developed, and authored Service Design assets and the Sources of Truth for The Experience Atlas, including Journey Maps, Ecosystem Maps, and a docs site.

Web Development and Photogrammetry Intern August 2023 – May 2024
National Park Service Remote, United States

- Develop 3D digital representations of the Lewis and Clark Trail by using ML and Neural Radiance Fields (NeRFs), integrating GIS data and historical archives to build detailed web-based landscapes in three.js.

UX Engineering Intern June 2023 – August 2023
Merck Kenilworth, New Jersey

- Authored Functional Requirement Specifications for RTL functionality and localization for EMEA's CMS.

Software Engineering Intern June 2022 – January 2023
Merck Kenilworth, New Jersey

- Utilized SageMaker for improved efficiency and data analysis on granular animal movement data.
- Co-authored "A More Granular View: How Collaborations Between Lab, Data, and Computer Scientists Enables More Efficient Data Capture and Usage" for presentation at the Merck Technology Symposium.

Service Design Intern January 2022 – May 2022
NASA Mountain View, California

- [Good Design Award Gold Winner \(Top Award\) - 2024 International Australian Good Design Awards](#) 🏆
- Authored "[Making Service Design Future-Proof at NASA](#) 📄" in the Service Design Network's Touchpoint Journal, Vol.14 No.2, Redefining Value Creation
- Co-led an Agile Futures Research team, creating 400 data-driven insights, pain points, forecasts, signals, drivers, trends, and scenarios based on 150 user interviews for NASA SBIR program implementation.
- Conducted 25 customer research interviews on colleges to identify customer roadblocks, assess customer needs and expectations, provide customer assistance, find pain points, and underrepresented users.
- Presented CX research strategy and product lifecycle review plan to SBIR/STTR leadership team, providing recommendations on long-term program strategy, product priorities, and customer research objectives.

PROJECTS

kpworld - 3D Web Scene with React and Three.js 📄

- Developed an interactive 3D Scene using R3F, incorporating dynamic audio and visualizations powered by Howler.js, advanced post-processing effects, responsive 3D models, and my original composed music.
- Engineered custom motion/orbit controls and designed audio-responsive shaders from scratch.
- Optimized asset space with DRACO & efficient loading strategies.

Robotics - Motion Planning
Rutgers CS460 - Computational Robotics
Implement a suite of motion planning and collision algorithms for a robot, including PRM, RRT, RRT*, Linear Search, and a simulated self-driving vehicle.

myshell.c

Rutgers CS214 - Systems Programming

- Created a custom C-based replica of a Unix shell with features like command parsing, conditional execution, piping, redirection, and both interactive and batch modes, with testing on tokenizer, arraylist, and shell robustness.

OTHER EXPERIENCE

Research Assistant

May 2024 – August 2024

Rutgers University

- Researched if AI could have a subjective perspective and it could look like practically (Robotics, Avatars).

NASA Proposal Writing and Evaluation Experience

September 2023 – December 2023

Student Researcher

- Led and served as Primary Chair for a \$10,000 NASA Proposal Review Board, led the discussion for 10 people to score proposals according to solicitation requirements.

Google SPS

May 2022 – August 2022

Software Product Sprint Participant

- Google SPS was a selective, 12 week, invite only program for students to develop SWE skills with Google SWEs.
- Deployed a web app for non-verbal children utilizing Vision API, Text-to-Speech API, and Datastore for voice recognition and image-to-audio. Engaged in weekly mentorship sessions with Google SWEs to refine techniques and best practices.

NASA L'SPACE Mission Concept Academy

January 2022 – April 2022

Student Researcher

- Analyzed volatile elements on the Moon's South Pole. Used systems engineering principles to develop a 75-page Preliminary Design Report, including mission concepts (requirements development, trade studies, risk assessment, and cost estimation) and a rover and CAD prototype in NX.

NSF I-Corps

September 2021 – November 2021

- Received a \$5,000 NSF grant.

Camp Counselor

June 2021 – August 2021

SKILLS

Languages

Ruby, C#, Python, Java, JavaScript, C, R, SQL

Tools, Frameworks, Libraries

React, NeRF, Unity, SageMaker, LINQ, threeJS, Rails, RSpec, JUCE, Express

Design/Misc Skills

Figma, Service Blueprints, Dovetail, Blender, Maya, Inventor, NX/CAD, Substance Painter, Logic Pro, Ableton

Hobbies :)

Basketball, Music Production, Games (Top 500 in Overwatch, ex-Masters in Apex, Diamond in Brawlhalla), Piano, Computer Science!