

Joie Chang

Education

Bachelor of Science in Architecture, Massachusetts Institute of Technology, Cambridge, MA

Graduation Date: June 2017 | Cumulative GPA: 4.8/5.0

Thesis: Designing in Virtual Reality: Tools with the Human Field of Vision

- Designed a virtual reality design review tool with Google Cardboard. Researched through user testing how spatial perception in digitally simulated virtual spaces informs architectural design.

Work Experience

AT&T Mobility and Entertainment, El Segundo, CA

Senior Systems Architect (September 2019 - Current)

Systems Architect II (January 2018 - September 2019)

Led multiple cross-disciplinary teams to deliver innovative cloud-based video streaming solutions.

- Led the research, development, testing, and integration of a technical compression solution for 6x storage savings and to support over 4 million customers.
- Worked on the end-to-end production software lifecycle, including pitching to key business stakeholders, creating features to balance business needs, developing deployment automation, building comprehensive monitoring systems, and leading operational handoffs.
- Deployed large-scale compute and storage platforms at an enterprise level using industry-standard technologies such as Kubernetes and CEPH, both on-premise and within the AWS cloud.
- Successfully launched AT&T TV with new cloud-based streaming services and features, such as Pause/Rewind TV and Cloud DVR, in August 2019.

MIT International Design Center, Cambridge, MA

Undergraduate Researcher (Summer 2016)

Designed prefabricated small housing for disaster relief in collaboration with Professor Larry Sass.

- Prototyped new wall and joint designs with 3D printing technology.
- Casted concrete shape modules that could be reused to create interlocking building structures.

Plan Cerro: Agrupación de Arquitectos y Profesionales Por Valparaíso, Valparaíso, Chile

Architecture Intern (Summer 2015)

Ran the pre-feasibility study for three funicular railway stations, Las Cañas, Los Cipreses, and El Litre, for the architecture and urban planning group, Plan Cerro.

- Collaborated with the city government to design the new Los Cipreses route in order to improve the connectivity between the city's coastal and mountain levels.
- Modeled station plans in Rhino, produced renders with Vray, and ran citizen participation workshops.

Smithsonian National Portrait Gallery, Washington, D.C.

Project Management Intern (Summer 2014)

Led the coordination of a public art installation, commissioned from Cuban-American artist Jorge Rodríguez-Gerada.

- Worked with Nik Apostolides, Associate Director of External Affairs, and other NPG partners to realize the 'Out of Many, One' facescape, a landscape composite portrait, constructed on the National Mall for the month of October 2014.

Skills

Technical:

- Languages (Java, Python, C#, Processing)
- AWS (EKS, CloudFormation, Lustre)
- Operating Systems (Linux, Unix, Windows)
- Time-Series Monitoring (Prometheus, Grafana, Splunk, Netdata, NewRelic, MySQL)
- Agile Project Management

Design:

- UX/UI Research & Design (MockPlus, Adobe Suite: Photoshop, Illustrator, InDesign, Premiere)
- Front-End Web Development (HTML, CSS, JavaScript)
- 3D Modeling & Animation (Rhino, Vray, AutoCAD, Revit, 3DS Max)
- Rapid Prototyping (3D Printing, CNC Milling)