# Junjie Chen

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2021 - 2024 (estimated)

## **EDUCATION**

## M.S. in Data Visualization and Augmented Reality (in progress)

School of Computer Science and Technology

East China Normal University, Shanghai, China

Supervisor: Changbo Wang, Chenhui Li

2017 - 2021

## **B.S.** in Software Engineering

Software Engineering Institute

East China Normal University, Shanghai, China

Thesis: 3D Reconstruction Research Based on ARKit Depth API and Metal Framework Selected Honor: National Scholarship, 2020; National Encourage Scholarship 2019, 2020

## **PUBLICATIONS**

## iARVis: Mobile AR Based Declarative Information Visualization Authoring, Exploring and

**Sharing** 

Authors: Junjie Chen; Chenhui Li; Sicheng Song; Changbo Wang

Published in: 2023 IEEE Conference Virtual Reality and 3D User Interfaces (VR) (CCF A)

**Date of Conference**: 25-29 March 2023 **DOI**: 10.1109/VR55154.2023.00017

## **WORK EXPERIENCE**

#### Tencent, iOS Developer Intern, IEG (Shanghai, China)

Jul. 2020 - Sep. 2021

Use the cross-platform framework <u>Weex</u> to quickly deliver UI refactors, bug fixes, and new features to our users. (JavaScript)

Take the responsibility to refactor the existing sharing menu and launch screen, while also develop features such as WeChat Mini-Program and link sharing, App Store rating invitation, privacy permission setting page, etc. (ObjC)

Investigate the integration of WeChat's LiteApp framework (internal only) with Flutter.

#### Trip.com, Server-side Developer Intern, Vacations (Shanghai, China)

Apr. 2023 - Jun. 2023

To improve the resilience of services, I worked on improving the launching performance by optimizing various aspects such as Spring AOP scanning and Tomcat jars scanning (speed up by ~20s in production in average).

Help analyze the causes of Full GC occurrences in the application using program logs and dump files, and subsequently implementing solutions to mitigate the frequency and impact of Full GC occurrences, including optimizing JVM parameters.

## Morgan Stanley, Summer Analyst, Cyber Data Risk & Resilience (Shanghai, China) Jul. 2023 - Sep. 2023

Work with the IAM (Identity and Access Management) team to build a DevOps-driven IaC (Infrastructure as Code) workflow using Terraform to manage IAM-related resources on the cloud providers such as Microsoft Azure.

Build a monitoring, alerts and auto remediation system to track and eliminate potential risks for Azure AD by using Alert Rules, Action Groups, Automation Runbooks (PowerShell and Python Scripts) and Container Instances (Docker).

A typical scenario is when detecting Configuration Drift, for example, some user is changing resources managed by Terraform accidentally, which may lead to potential divergences and risks for attackers, the system will rollback the resources by starting a Docker instance and re-apply the Terraform configuration.

Integrate the monitoring workflow with third-party SaaS platforms such as PagerDuty and Jira to notify on-call users using Emails, SMS, and Microsoft Teams, and track the lifetime of alerts.

Last Updated: Aug 12th, 2023

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#### **SELECTED PROJECTS**

Dec. 2018 - Oct. 2020 AR Laboratory

We use both <u>Unity</u> and <u>ARKit</u> to develop Augmented Reality-based physical, chemical and biological experiments in school textbooks to allow students to explore expensive and impossible experiments on their iPads. (C# and Swift) Selected Awards: Mobile Application Innovation Contest, Second prize, 2020. (Hosted by ZJU and Apple)

## Storm - 3D simulation of urban flood disasters

Oct. 2020 - Jan. 2022

We use <u>Unity</u> to construct a simulated flooding scenario of a specific area in Guangdong city incorporating with scanned 3D models and virtual flood effects to visualize potential risk and devise escaping plans. (C#)

Mar. 2022 - Present ecnu.im

ecnu.im is an iOS client designed for the campus BBS of ECNU, utilizing frameworks such as SwiftUI and Combine to build the most part of the user interface. The project incorporates various third-party libraries, including Alamofire, Kingfisher, SnapKit, SwiftyJSON, etc. ecnu.im is currently available on TestFlight and has been delivered to hundreds of users now. (Swift)

## <u>Logseq Plugin - Image Uploader</u>

Jan. 2022 - Present

Logseq is an open source bidirectional linking knowledge management tool. We develop an open source plugin for Logseq to upload images to hosting services using PicGo. The plugin has been downloaded more than 2, 000 times in the Logseq's community. (JavaScript)

## AR and VR-based Server Room Operation System

March. 2023 - Present

We build a server room operation system using augmented and virtual reality technologies, to explore how the industry leading hardwares can benefit the operation workflow. We provide an AR system for operators in the server room, and a VR system for domain experts in the office, and connect them using realtime connections such as WebSocket with realtime video and audio streams for communication.

## **TECHNICAL SKILLS**

**Programming Language** C/C++, Java, Swift, Objective-C, Go, Python, SQL, Shell, etc.

**Web Development** HTML, CSS, JavaScript, TypeScript; React.js, Vue.js

**Mobile App Development** iOS: Swift; UIKit, SwiftUI; Cross-platform: Weex, Flutter **Server-side Development** Java SpringBoot, Node.js Express, PHP, Swift Vapor, Go, etc.

Infrastructure DevOps, Docker, Terraform, etc.

Game Development,

Unity 3D, ARKit, ARFoundation, OpenXR, etc. **Augmented & Virtual Reality**