Hagyoon Choi

I am a software engineer with over 15 years of experience in all aspects of software development, including front and backend development, building and releasing software, and working on projects of various sizes and complexity, from small projects built from scratch to large legacy codebases. In addition to my professional experience, I have also done freelance work in the past and have been considered a skilled coder and hacker since my early days of writing a quiz game in GW-Basic and hacking BBS systems. I am seeking a challenging role in software development and the opportunity to work with intelligent and interesting colleagues.

PROFESSIONAL SUMMARY

May. 2022 –Nov.2022   **Twitter**   Remote, California, USA
Software Engineer

- Working as a software engineer in Cloud acceleration team. worked on maintaining&developing features for self-serving public clouds(GCP,AWS) infrastructure services and PDP(personal data protection) compliance-related cloud data labeling services.

- Aurora, Mesos, Bazel, Terraform, python, typescript, react JS.

Jan. 2016 –Nov.2021   **Nexon America**   El Segundo, California, USA
DevOps Engineer

- Working as a DevOps and launching multiple online game projects such as Lawbreakers, Rocket Area and Hyper Universe. (Establishing processes between developer and production and for a release cycle. Backend system review, conducting load test, live operations, beta&launching preparation, creating&managing production, and testing environments for the different purposes, automating environment creation, preparing autoscaling, adding monitoring metrics and logging, etc.)

- Maintaining Legacy game services such as Mabinogi, Vindictus

- Developing tools(Full Stack) for the online game operations such as LogViewer(remote log tailing tool with middle servers for the ACL and Routing), Alice(CRM tool).

- Cloud Provider: AWS (EKS, ECR, S3, Dynamo, ELB, Kibana, GameLift, etc)

  Docker, Kubernetes, Splunk, Spinnaker, Helm, Zabbix, Jenkins, Rundeck, Zabbix, Grafana,Ansible,Terraform and etc

  Language: Python, Golang, c#, Javascript

  Web: Django, Bootstrap, AngularJS, Jquery

Mar. 2014 – Dec.2015   **Crytek, Gmbh**   Frankfurt Am Main, Germany
Generalist Programmer

- Designing & developing the scalable backend for Hunt: showdown project.

- Working on the backend, the build, and the deployment system for the Warface West project.

- Developing tools for the game engine such as asset validation system (asset manager, validating assets based on the level resource usage, validating procedurally generated LOD by taking a snapshot, etc) and vehicle design system.

- Language: C/C++, python, C#

  Platform: Windows

  Version control: Perforce

  ETC: Waf(meta build system), QT(GUI Framework for the game engine tool development)

  Backend Framework: Orleans, protobuf

Apr. 2012 – Mar.2014   **Crytek Seoul**   Seoul, Korea

Generalist Programmer – lead role

- Localizing&Launching one of the most successful games in Russia, Warface, in South Korea

- Working with the overseas studio and publisher for the successful launching of the game in South Korea. contributed Warface Korea service throughout from preparing the first closed beta to live service.

- Working on the complex build & deployment pipeline system that involves obfuscation of client code, backend services, etc.

- Writing code for client & backend localization. (profanity filter and other systems for the legal requirements)

- Writing code the publisher platform integration (SSO, monetization, monitoring, security).

- Developing a crash reporting system,

- *Language: Erlang(ejabberd), C#, C/C++. Python, Javascript, MSBuild.*
  Database: MySQL
  Platform: Windows, Linux
  Version control: Perforce
  Web: Php, Django

Jan. 2010 – Apr. 2012   **Nexon, Corp**   Seoul, Korea

Generalist Programmer

- Participated in one of the most successful online video games projects in South Korea, KartRider.

- Designing&Developing a new game mod(giant battle mod, boss mod) for KartRider.

- Developing events systems for KartRider.

- Proactively proposing&conducting new systems integration to the development process for improving productivity such as IDE or visual studio upgrade, adapting modern source control system(mercurial).

- Experiment with the engine code for improvement such as higher resolution support, migrating software toon rendering code to shader code.

- *Language: C/C++.(with STL).*
  Database: MS-SQL
  Platform: Windows
  Version control: SVN, Mercurial

ETC: Direct X9, IOCP(IO-completion port)

Jan. 2006 – Jan. 2009 **Autobrain, Inc, Software Developer**   Seoul, Korea

Software Engineer

- **Responsible for SFA, CRM development:** Developed and serviced over 5 SFA(sales force automation)and CRM(Customer Relationship Management) projects for automobile dealers.

- Language: Java
  Web Technologies: JSP
  JavaScript and AJAX frameworks: DWR, Prototype, jQuery
  Enterprise Java architecture and frameworks: Spring, Struts, Hibernate, Toplink
  Build, release, and source code management: ant, maven, ivy, subversion

  Database: MS-SQL

CERTIFICATIONS (*All Expired)

Microsoft Certified Professional (MCP), Microsoft 2007

Microsoft Certified Database Administrator (MCDBA), Microsoft 2008

Oracle Database 10g Administrator Certified Professional (OCP), Oracle 2009

Docker Certified Associate, 2018

EDUCATION

Kookmin University: BS in Computer Engineering School of 2010

Georgia Institute of Technology: MS in Computer Science, Specialization in Computational Perception and Robotics of 2020

TECHNICAL SKILLS

Machine Learning(PyTorch, TensorFlow, scikit-learn), Reinforcement Learning, Robotics, Computer Vision(Open CV)

Programming Languages: C/C++(STL), F#, Closure, C#, Java, Javascript, Erlang, python, LUA(pico 8), Julia, GoLang

Computer graphics API: DirectX 9.0c

Knowledge of 3d Algorithms, 3D Math and computational geometry, Shadertoy, Ray tracing

Network programming experience in multithreaded software architecture

Enterprise Java architecture and frameworks: Spring, Struts, Hibernate, Toplink

Build, release, and source code management: ant, maven, ivy, subversion, CVS, mercurial, perforce, waf, Jenkins, GitLab

JavaScript and AJAX frameworks: DWR, Prototype, jQuery

Web Technologies: JSP, ASP, AJAX, HTML, CSS, PHP, DJango

Web/app. Servers: Tomcat, IIS, Oc4j

Databases: Oracle, MySQL, MSSQL

Operating Systems: Linux, Windows

Cloud Provider: VMWare Cloud, AWS

DevOps Tools: Docker, Kubernetes, Spinnaker, Helm, Zabbix, Jenkins, Rundeck, Zabbix, Grafana, Ansible, Terraform.

Public Talk at Conference

Microservices, development of game backend architecture for the ease of operations At NDC (2019), South Korea

Awards

2004 ACM ICPC Asia Regional – Bronze Medal - Seoul 9th Place

2009 ACM ICPC Asia Regional - Seoul 19th Place