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OBJECTIVE:

A challenging software engineering position that deeply utilizes algorithms and critical thinking (i.e., Android/iOS Software Engineering, Web Back-End Engineering, Microservices Engineering, etc.)

SUMMARY:

Gained exposure to key concepts of Computer Science and Engineering as a graduate researcher in the Networked Systems Lab[1]. Also, prior to graduate school, gained professional experience in industry by working as a Software Engineer in IUTLab[2], and conducting a club of programmer students in Inha University in Tashkent.

SKILLS / KEYWORDS:

- C++ (from 98 till 17), Java (7, 8), Python, C#, SQL
- Git, Docker, Adobe Photoshop, Latex, OS proficiency (Mac OS, Windows, Linux), gRPC
- Algorithms (problem solving), Android application development, Microservices, Django (REST APIs), Ionic (TypeScript)
- Confidence, Time management, Focus, Friendliness and manners, Work ethics, Public speaking, Research

EDUCATION:

- Bachelor's Degree, 2018, Computer Science and Engineering (GPA 3.42 / 4.5), INHA UNIVERSITY in Tashkent (IUT), Uzbekistan
- Master's Degree, 2020, Computer Science and Engineering (GPA 3.86 / 4.5), INHA UNIVERSITY, Incheon, South Korea

MASTER'S RESEARCH THESIS TITLE

- "IMSP: an Intelligent Mobile Sensing Platform for Automatized Abnormal Behavior Detection"

EXPERIENCE:

Graduate Research Assistant, Networking Systems Lab in INHA University, South Korea, full-time 2018-Present
Involved in research projects:
- EasyTrack (conference MobiSys 2019) - a large scale sensor data collection platform for researchers
- IMSP (conference KICS 2020)
- STDD (IEEE Sensors journal paper 2020)
- MindForecaster (conference CHI 2020) - mobile application to help users prepare for stressful events using personalized interventions
- SNMP/GOOSE KERI[3] - network failure monitoring platform, in collaboration with KERI (outsourced project)
- 오늘하루 - A cognitive behavioral therapy program to improve various psychological difficulties (outsourced project)
- etc.

Lecture Assistant in INHA University, South Korea, part-time 2018-2019
- Conducted laboratory courses for Application Programming in Java (201802CSE2107001, and 201901CSE2107001)
- Conducted laboratory courses for ComputerNetworks (201902CSE4202001)

Software Engineer, IUTLab Tashkent, Uzbekistan, part-time 2016-2017
- Developed Windows and Android client applications (i.e., Kadrlar, MindWind, etc.)
- Used: C#, Java, Maven, PostgreSQL, Git, Firebase, Android Studio, Eclipse, Microsoft Visual Studio

PC & Mobile Phone Repair Assistant Technician, Kashkadarya Uzbekistan, part-time 2009-2011
- Repaired mobile phones (hardware and software)
- Did OS installations (Windows XP)
- Assembled / disassembled PCs and mobile phones

LANGUAGE SKILLS

English - fluent (active IELTS 7.5 / 9)
Russian & Uzbek - bilingual (native)
Korean - intermediate (able to conduct non-complex conversations)

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[1] nsl.inha.ac.kr (INHA University, South Korea)
[2] iutlab.uz (Tashkent, Uzbekistan)
[3] Korean Electricity Research Institute

PUBLICATIONS

- EasyTrack - Orchestrating Large-scale Mobile User Experimental Studies (2019), MobiSys'19 Proceedings
- IMSP - an Intelligent Mobile Sensing Platform for Automatized Abnormal Behavior Detection (2020), KICS Winter Conference 2020 (under publication)
- Toward Future-Centric Personal Informatics: Expecting Stressful Events and Preparing Personalized Interventions in Stress Management (2019), CHI'20 Proceedings (under publication)

LABORATORY PROJECTS DETAILS (MS, INHA University)

- EasyTrack - Orchestrating Large-scale Mobile User Experimental Studies (2019), MobiSys'19 Proceedings
  - Duty - created a generic purpose, large-scale sensor data collection platform for Mobile and Wearable devices; and conducted a preliminary observation on detection of abnormal behavior of participants using Density Based LOF technique. (publication1, publication2)
  - Tools - Latex, Django, gRPC, LOF, MongoDB, Google Play Services, Tizen SDK, Gnuplot, Maven, Git
- STDD – Early Depression Detection with Passive Sensing (publication)
  - Duty - created a Web server using Django framework that collects passive sensing data from participant devices; (source-code)
  - Tools - Latex, Weka, Django, PostgreSQL, Gnuplot, Git
- Toward Future-Centric Personal Informatics: Expecting Stressful Events and Preparing Personalized Interventions in Stress Management (2019), CHI'20 Proceedings (under publication)
  - Duty - created a Web API server and Android client application for sensor data collection; and conducted a mobile user study on effectiveness of interventions on reduction of stress levels.
  - Tools - Latex, oAuth 2.0, PostgreSQL, Google Play Services, Gnuplot, Django, Git
- 오늘하루[4] – Cognitive behavioral therapy program to improve various psychological difficulties
  - Duty - developed a cross-platform (iOS/Android) application using Ionic SDK (on top of AngularJS, and Apache Cordova) by the request of Yonsei University (yonseiharu@gmail.com).
  - Tools - Ionic, MySQL, Git
- SNMP KERI – Network node failure monitoring platform, in collaboration with 한국전기연구원 (source-code)
  - Duty - created a platform (for Windows OS) that utilizes SNMP protocol to acquire each station's network usage statistics; and tested in a laboratory environment in 한국전기연구원.
  - Tools - WinForms, SnmpSharpNet, WireShark, Git
- GOOSE KERI – Network link failure monitoring platform, in collaboration with 한국전기연구원. (source-code)
  - Duty - Created a platform (for Windows OS) that captures GOOSE packets within a PRP/HSR networks, utilizing the hardware address stamped in the GOOSE packets to detect broken links within the networks; and tested the platform in a laboratory environment in 한국전기연구원.
  - Tools - WinForms, SharpPcap, WireShark, Git
- DARCA – Dynamic Association Regulator Considering Airtime over SDN-enabled WiFi (source-code)
  - Created a virtual wireless network topology on ns-3; and modified existing TCP to perform a hard-handover of a station between APs triggered by decreasing RSSI values when a station nearby one AP moves away, and approaches another AP within a wireless network.
  - Tools - Latex, ns-3, WireShark, Gnuplot, Git

SCHOOL PROJECTS (BS, INHA University in Tashkent)

- LabEx – a labyrinth-explorer toy car equipped with ATMega128A microcontroller that solves physical labyrinths using the "right-hand rule" maze solving algorithm[5].
- MyWeek – personalized calendar-based application that uses a Backpropagation NN[6] to learn user's preferences (choices of time) on calendar events by categorizing them (i.e., football match, watching movies, meet friends, etc.), and suggests possible time slots during event creation.
- Fimetable - a flexible timetable generator application for academic institutions that automatically generates and suggests possible timetables that match institution's criteria (i.e., availability, capacity, etc.).

CONFERENCES

- KICS Winter Conference (Feb. 5th - Feb. 7th, 2020), Yongpyong Resort, Pyeongchang, South Korea
- MobiSys2019: The 17th ACM International Conference on Mobile Systems, Applications and Services (June 17th - June 21st, 2019), Coex - Gangnam, Seoul, South Korea
- HCI KOREA 2019: 층간笑音 Surfing on the New Wave (Feb. 13th - Feb 16th, 2019), Jeju Island – ICC (International Convention Center), South Korea
- SparkLabs Demo Day (June 30th, 2017), Coex, Seoul, South Korea
- SIGCHI Korea Local Chapter 2018, Spring Academic Workshop (April 13th, 2018), KAIST – Daejeon, South Korea

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[4] Source-code could not be shared due to privacy concerns by Yonsei University; website: haruasd.net
[5] *Right-hand rule:* en.wikipedia.org/wiki/Maze_solving_algorithm
[6] *NN:* Neural Network

HIGHLIGHTS

- 2018. 정석 International Scholarship Winner, Incheon, SOUTH KOREA
- 2017. Winner of the Government Stipend by Ministry of ICT, Tashkent, UZBEKISTAN
- 2017. Participant of "K-Global Starthon 2017", Pangyo Techno Valley, SOUTH KOREA
- 2016. Runner-up in "MIT.UZ Open Data Challenge" hackathon, Tashkent, UZBEKISTAN
- 2016. Winner in the contest "Development of IUT Academic Scheduling Tool", Tashkent, UZBEKISTAN
- 2016. Recipient of "Outstanding Contribution to the development of IUT", Tashkent, UZBEKISTAN
- 2016. Winner in "Kafolat Insurance Mobile App Contest", Tashkent, UZBEKISTAN
- 2016. Runner up in the contest "IT Projects in Uzbekistan - Intellect2all", Tashkent, UZBEKISTAN
- 2016. Participant of 1/8th in the contest "Uzbekistan Cyber Security Challenge", Tashkent, UZBEKISTAN
- 2015. Started running "Desktop Applications Club" (club of developer students) in IUT, Tashkent, UZBEKISTAN
- 2014. Ranked 6th academically among 119 students in class of 2014 from IUT, Tashkent, UZBEKISTAN
- 2014. Academic Scholarship winner in Inha University in Tashkent, Tashkent, UZBEKISTAN
- 2014. Top 10 Dean's list of students with outstanding academic performance in IUT, Tashkent, UZBEKISTAN
- 2014. Runner up in "The First Inaugural Software Contest of IUT", Tashkent, UZBEKISTAN