Minyoung Choi

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Relevant Work Experience

Core EngProd — Sunnyvale, CA
Software Development Engineer — *Feb 2022 – Present*

AWS Health AI / HealthLake — Bay Area, CA/Seattle, WA
Software Development Engineer — *Mar 2021 – Feb 2022*
- Updated and integrated a Java Fast Healthcare Interoperability Resources (FHIR) resource validation library into customer data ingestion workflows
- Developed and maintained the JavaScript/TypeScript React-based AWS web console for the service, including setting up service dashboards, canaries, metrics, and alarms
- Integrated service with CloudFormation, including dashboards, canaries, metrics, and alarms, allowing customers to use CloudFormation to create and manage Healthlake resources with AWS infrastructure

Amazon Alexa — East Palo Alto, CA
Software Development Engineer — *Dec 2018 – Mar 2021*
- Internationalized an Alexa Shopping notification feature in Java to support non-US marketplaces, enabling its launch in APAC and EMEA marketplaces, an expanded its availability using AWS infrastructure
- Added localization support to the feature, enabling customer interactions in their preferred language
- Designed and implemented a CX flow system in an interactive Alexa Skill, allowing for a more dynamic and natural customer experience
- Created a D3.js visualization tool to allow the team to track and analyze customer interaction flows
- Set up and maintained test suites and infrastructure to enable automated testing in different regions and languages
- Wrote automated business intelligence queries and reports
- Provided away-team development work and knowledge transfers as needed to accomplish tasks

Helix — San Carlos, CA
Software Engineer — *Apr 2017 – Dec 2018*
- Developed a scientific knowledgebase enabling the internal science team to track research progress with business partners, validate their evidence, and codify the validation process
- Created a ReactJS frontend to interact with the Python Flask and PostgreSQL backend of the knowledgebase
- Converted legacy form-based endpoints to RESTful API service endpoints, allowing for interoperability with software and tools written by other teams within the company
- Set up a Neo4J graph database containing a custom ontology of electronic health record and phenotype data
- Increased test coverage for all newly written code from a baseline 40% to a minimum of 90%

Stanford School of Medicine — Cherry Lab, Palo Alto, CA
Software Engineer — *Jul 2015 – Mar 2017*
- Developed the ClinGen Curation Interface, a browser-based tool that allows scientists and healthcare professionals to collect and share clinical data related to genetics-driven diseases
- Developed major portions of the ReactJS and SCSS frontend based on user workflows and mockups
- Customized the Pyramid and ElasticSearch backend to suit organizational authentication, authorization, and search needs
- Designed JSON-based data storage schemas for storing curated metadata in a structured format
- Wrote and maintained selenium frontend and pytest backend tests

Affymetrix — Santa Clara, CA
Bioinformatics Services Engineer — *Jun 2013 – Jul 2015*

University of California, Davis — Neale Lab, Davis, CA
Bioinformatics Programmer — *Jul 2007 - Jul 2010*

Education

Georgetown School of Medicine — Washington, DC
Special Master's Program – No Degree — *2010 – 2011*
- Thesis: Use of Induced Pluripotent Cells for the Treatment of Parkinson's Disease

University of California, Davis — Davis, CA
B.S. in Biotechnology, Minor in Neuroscience — *2005 – 2009*
- Honor's Thesis: Pyrolysis-MBMS association study of known peaks related to biofuel-related traits