# **GRAYSON OLDOKH**

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#### FULL STACK SOFTWARE ENGINEER

Seasoned Software Engineer with over 6 years of expertise in developing, designing, and maintaining enterprise web applications using JavaScript and Python. Experienced in both startups and large corporations, adept at working within Waterfall and Agile/Scrum SDLC methodologies, and proficient with mission-critical systems utilizing the Waterfall and V-Model methodology. A quick learner, capable of taking on challenges and delivering production-ready solutions swiftly. Proficient in Node.js, React, Next.js, ExpressJS, PostgreSQL, and MongoDB.

MERN stack Asynchronous Programming SSR CSR CI/CD Web Applications

\Agile Methodologies Test Driven Development

Languages: JavaScript, TypeScript, Python, Java

Web: HTML, CSS, TailwindCSS, NodeJS, ReactJS

Web Services: REST, SOAP, GraphQL

Web/App Servers: Nginx Frameworks: NextJS, Jest, Express

Databases: PostgreSQL, MSSQL, MySQL, MongoDB

Design Patterns: Microservice, Singleton, Prototype, Builder, Factory, Facade, Proxy, Observer, Mediator

SDLC: Agile, Scrum, Waterfall, DevOps, V-Model Tools: VS Code, IntelliJ, Figma, React Testing library, Docker, Git, GitHub, GitLab, BitBucket Platforms: Windows, macOS, Linux, Ubuntu

Application/Software: Tableau, MuleSoft

#### PROFESSIONAL EXPERIENCE

*CAREER NOTE:* Completed on-campus studies and currently taking distance education courses to complete a *Master's Degree in Computer Science* (Available for full-time, W-2 employment).

NEST EDUCATION IT SCHOOL, Ulaanbaatar, Mongolia 01/2022 – 10/2023

Private high school.

**Senior Software Engineer** 

Developed ERP systems, payment modules, and educational projects.

• Led a cross-functional team in the development of a local ERP program, utilizing Python and Raspberry OS to integrate NFC readers. This implementation streamlined business processes and bolstered security measures, enhancing access control within the organization.

• Designed the architecture and implemented a wallet system within the School ERP, utilizing Next.js, Tailwind CSS, Express.js, and MySQL. This integration enhanced financial management within the ERP, providing students and staff with a streamlined payment solution.

• Implemented and integrated a new feature middleware payment module using QPay in the www.ulger.mn fairy tale mobile application.

• Leveraged Express.js and PostgreSQL to ensure robust backend functionality and seamless database integration. This module facilitated secure and seamless payment processing within the app, enhancing user experience and enabling convenient transactions for users.

• Superheated projects by overseeing and mentoring a team through project completion. Guided team members in planning and executing their IT projects, providing necessary technical support. Fostered a collaborative environment where employees developed technical skills and gained project management experience.

Technologies Used: NextJS, NodeJS, TailwindCSS, MongoDB, MySQL.

# OYU-TOLGOI, Ulaanbaatar, Mongolia 04/2019 – 12/2021

Oyu Tolgoi is one of the world's largest copper and gold deposits, operated by Rio Tinto.

#### Software Developer

Implemented and integrated new features into the production system.

• Implemented a project to migrate and transform code to MuleSoft, focusing on identifying and eliminating unnecessary processes. Achieved significant cost savings and received recognition and rewards from the parent company, Rio Tinto, for successful implementation.

• Spearheaded a mission-critical underground blasting acknowledgment system using Waterfall and V-Model methodologies.

• Collaborated with stakeholders for seamless integration and implemented robust features to enhance performance and reliability, enhancing and maintaining safety and efficiency in underground operations.

• Developed a real-time elevator tracking system using React.js and Express.js. Provided status updates and punctuality indicators for personnel cages descending underground, like an airport information board. Ensured efficient operations by displaying current and upcoming cage information.

• Participated in an AI pitch competition for Oyu-Tolgoi, using Python, React.js, TensorFlow, pandas, NumPy, and MSSQL.

• Implemented predictive modeling to optimize device allocation, preventing unexpected flows and significantly enhancing operational efficiency and cost-effectiveness.

• Created a middleware web application integrating Tableau reports and dashboards with API services using Express.js and React.js.

• Enabled seamless data flow between Tableau and the API, enhancing data tracking, analysis, and reporting capabilities. This integration provided Oyu-Tolgoi and Rio Tinto with comprehensive insights for informed decision-making.

#### DENTSU DATA ARTIST MONGOL, Ulaanbaatar, Mongolia 03/2018 – 04/2019

AI module & System development services in digital marketing.

#### **Senior Software Engineer**

Web application development, data engineering, training model.

• Led the development of an application to efficiently crawl over 300 websites, replacing manual processes. Used React.js, Electron.js, PostgreSQL, and Express.js to streamline the process and reduce time resulting in early project completion and demonstrated a commitment to efficiency.

• Developed a predictive model for the Asta-Muse project using Node.js, TensorFlow.js, and Chromium with Lean and Scrum methodologies. Achieved over 90% accuracy in detecting fake URLs, significantly reducing the time spent on invalid URLs and boosting overall efficiency and productivity.

• Managed the data processing pipeline for the Asta-Muse project, performing comprehensive data cleaning, normalization, and preparation with Python. Leveraged Pandas, NumPy, and scikit-learn for dataset cleaning and standardization, ensuring high quality and consistency.

• Implemented advanced techniques for feature engineering and data preprocessing to optimize model performance, laying a solid foundation for project success.

• Enhanced model accuracy in the advertisement verification system with Python, JavaScript, TensorFlow, Pandas, and NumPy which led to a significant reduction in manual verification staff, decreasing from 20-30 hourly employees to just 2-5 main employees.

• Implemented a new feature in legacy code within three weeks, learning Perl to meet the head company's requirements. Delivered on schedule, maintaining stakeholder satisfaction and trust.

#### Technologies Used: ReactJS, NodeJS, Python, Tensorflow, TensorflowJS

#### INTERACTIVE BI, Ulaanbaatar, Mongolia 01/2015 – 02/2018

ERP software development company.

#### Software Engineer

Full Stack Developer

• Developed a financial program for a Non-Bank organization using Java EE for backend and MSSQL, .NET Framework for frontend, implementing monthly interest and loss calculations, and enhancing financial accuracy.

• Built a custom MS-SQL module to calculate loan schedules with two methods: equal monthly payments and equal principal payments. Enhanced accuracy and flexibility in loan repayment planning using advanced financial modeling techniques, ensuring efficient project data management.

• Led a team of four software engineers in combining Waterfall and DevOps methodologies to expedite project delivery. Coordinated development cycles and applied agile principles within a structured framework, optimizing collaboration and efficiency. This approach facilitated proactive issue resolution, ensuring timely delivery of high-quality, thoroughly-tested results.

• Implemented detailed financial reports for loan analysis using Java EE for the backend and .NET DevExpress Framework for the frontend. Leveraged Java EE to handle data processing efficiently and implemented user-friendly interfaces with .NET DevExpress, enhancing reporting accuracy and efficiency.

• Created a profit calculation module in a POS program using FIFO calculation, enhancing efficiency and accuracy in profit calculations. Leveraged Waterfall methodology to ensure precise cost allocation and streamline operational workflows, resulting in improved financial reporting and informed decision-making.

• Executed targeted marketing strategies to launch a financial program, resulting in the acquisition of 100 customers within six months. Collaborated on developing new features and critical updates, improving product functionality and meeting evolving customer needs.

Technologies Used: Java, .NET, MSSQL, Java EE, Primefaces, DevExpress, Wildfly.

# **RELEVANT PROJECTS**

Maharishi International University (2023) Meditatly: Meditation timetracking web application. Students can do group meditation and can get reports. Utilized AngularJS, TypeScript, MongoDB, ExpressJS

https://www.maranathatour.com/ 2023: Tour website. Utilized NextJs, MongoDB, AWS Lambda, S3, Tailwindcss

https://barilgiin-delguur.mn 2021: Online shop. Utilized NextJS, ExpressJS, MySQL, Socket.io, Tailwindcss, s3, AWS lambda

# **EDUCATION**

# Master of Science in Computer Science

(In progress via distance education; expected completion 06/2026) Maharishi International University, Fairfield, Iowa

Key Courses: Software Engineering, Modern Web Applications, Algorithms, Enterprise Architecture

# **Bachelor's of Computer Science in Computer Science**

Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

# CERTIFICATION

AWS Cloud Practitioner

https://www.credly.com/badges/dbb99827-4876-4896-b337-9280e7a1c81b