Syed Talha Ali

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SKILLS

Languages : Python, Java, Go, JavaScript, TypeScript, C, C#, HTML, CSS, SQL, Racket, Haskell, MIPS Assembly
Libraries & Frameworks : React, ASP.NET Core, Django, gRPC, GraphQL, jQuery, Numpy, Material UI
IDEs & Tools : Visual Studio, Pycharm, Docker, Eclipse, VirtualBox, GitLab CI/CD
Version Control : Git

EDUCATION AND AWARDS

University of Toronto
Aug. 2019 – May 2024

Honours Bachelor of Computer Science (BSc) and Minor in Math 4th Year

- **CGPA**: 3.61 on a 4.0 Scale
- **Coursework (Computer Science)**: Object Oriented Design, Data Structures, Algorithm Design, Problem Solving, Complexity Analysis, Software Design, Operating Systems, Databases, Web developement, AI
  Coursework (Math): Calculus, Linear Algebra, Statistics and Probability, Mathematical Proofs, Combinatorics

Awards

Scholarships

- **UTM Entrance Award**: $3,000
- **University Of Toronto Scholar** : $7,500
- **Dean's List** : Top 15% of all students

EXPERIENCE

Wish
Dec. 2022 – Present

Software Engineer Intern

- Currently working on launching a microservice to power Wish's WSS stats pages
  * Implemented repository pattern for microservice using **Golang** to minimize scattering and duplication of query code
  * Constructed **GraphQL** API to help data flow through microserivce and UI providing another layer of abstraction
  * Added **Gitlab's CI/CD pipeline** status checks on Github repository ensuring safe code changes

Wish
Sep. 2022 – Dec. 2022

Software Engineer Intern

- Refactored pages that previously used a legacy **REST API** back-end to a **GraphQL** back-end overall providing better maintainability and performance
- Refactored UI pages that previously used legacy **Backbone.js** components to **React.js** overall decreasing technical issues and improving user experience
- Created numerous scripts to pull and analyze data in order to estimate payment risk for Marketplace Payments and Risk team

Wish
May. 2022 – Aug. 2022

Software Engineer Intern

- Built internal developer tools for Marketplace Payments team reducing engineering effort by a significant amount
  * Developed tool to introduce comparison of all Wish's payment balances and total amount needed to pay merchants for each payment cycle which effectively **reduced the oncall engineer's operation time by 4 hours**
  * Constructed a feature to allow admins to reset a merchants balance to 0 when creating merchant fines **overall reducing engineering work by 2 hours**
- Collaborated with relevant stakeholders to create/improve features for Wish's merchant website using **JavaScript, TypeScript, React, Python, Django and MongoDB**

PROJECTS

Buddies - Google Developer Students Club *github.com/GDSCUTM-CommunityProjects/Buddies*

- Worked in a fast-paced environment (4 members) to create a web app that serves as a funneling station for people to come and look for reliable group partners.
- Backend: **ASP.NET Core (C#), Entity Framework Core (ORM), PostgreSQL**
- Frontend: **TypeScript, ESLint (Airbnb Preset), React (Next.js), Material UI, Axios**
- Implemented core and complex features such as user profile, recommendation system, leaderboard and project dashboard
- Created a **recommendation system** to recommend users for a user's project through **Matrix Factorization and KNN algorithm**

YouTube Aug. 2019 – Present

Creator (@InternetReacts)

- Grew channel through social media and sponsorships to **3000 subscribers in 1.5 years**
- Created **20+ data visualizations** with a partner on sports statistics using **Python** libraries such as Plotly and Bar-chart-race **accumulating 2.5M total video views**
- **Featured on the pages of world renowned brands like SPORTbible, SPORF and GiveMeSport**
- **Highlights**: Goal Comparison By Age, Player Performace Comparison in UEFA's Top 5 Leagues, Messi vs Ronaldo

Self Learning Drawing Bot Game *github.com/stalhaali/SelfLearningDrawingBot*

- Trained a machine learning model in **Python using Scikit-learn's** KNeighborsClassifier; **achieved a 90%** test accuracy on drawings
- Implemented a web app by using **Flask** as the back-end and used **HTML, CSS and JavaScript** to create the front-end
- Processed the images sent from the front-end into a form readable by the trained model, using **Computer Vision/OpenCV**

EXTRACURRICULAR

Canadian Ultrasound Institute and Research Centre Aug. 2017 – 2019

Volunteer

- Taught new immigrants the basics of **Microsoft Office software (Excel, Word and Powerpoint)**, gaining over **100+ volunteer hours**