YATIN KAPUR

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TECHNICAL SKILLS

LANGUAGES: Python • SQL • JavaScript • R • C++ • C • Racket (Scheme) • HTML5 • CSS • LaTeX

FRAMEWORKS & LIBRARIES: Django • D3 • Bootstrap • Numpy • Scipy • Matplotlib • Pandas • SKLearn

TOOLS: JupyterLab • Git • MySQLWorkbench • Excel • Google Cloud Platform • FTP • SAP • Bash • SOAP • Vim • JIRA

EXPERIENCE

Toronto FC
Analytics & Software Engineering Intern   *Toronto, ON | January 2018 – Present*

- Developed model to detect open, line-breaking, and penetrative passes based on distance, player speeds, and ball speeds
- Applied geometric concepts such as minimum cost perfect matching to conduct spatial analyses for 120,000+ frames per game
- Implemented Object Oriented Software principles into analytics library for more reusability and sustainable architecture
- Built a tool with Django to optimize xG model by tracking defenders on shot events with data sent to the database using AJAX
- Designed D3.js dashboard to show Z-scores of specific on-ball events over a season's data for half time analysis during games
- Created a win probability calculator at a per minute basis using logistic regression on time remaining and scoring probability

Indigo Books & Music
Quality Assurance & Support Intern   *Toronto, ON | May 2017 – September 2017*

- Managed shipping logistics, label printing, and procurement logic using ERP and EWM modules in SAP
- Programmed and executed over 100 tests in HP Application Lifecycle Management while reporting bugs to JIRA
- Applied regression, unit, and black box testing to validate web store requirements for end to end order procurement
- Curated multiple SQL queries to prepare and aggregate vendor, product, and shipping data

PROJECTS

Find Footy
findfooty.ca   *Active Blog*

- Compared expected goals (xG) with points dropped to measure goalkeeper stability
- Predicted the Euro 2016 knockout match outcomes with an accuracy of 56.25%
- Analysed how possession adjusted shot frequency impacts shots on target and goals

$ticker
ykticker.herokuapp.com   *July 2017*

- Developed a responsive stock ticker for NASDAQ symbols with live quotes available with 60 second granularity
- Implemented with data collected from googlefinance library in Python and googlefinance CSVs
- Python, Flask, Heroku, Matplotlib, Pandas, Bootstrap

Password Analysis
github.com/yatin-kapur/password-analysis   *June 2017*

- Conducted entropy analysis to decipher strength and wrote a script to increase password entropy by 30.24%
- Tested a sample of 61,682 user entered passwords and classified them into categories using regex
- Python, Jupyter, BeautifulSoup, Re, Matplotlib, Pandas

ACHIEVEMENTS

CONCACAF CHAMPIONS LEAGUE - 2ND | Part of the front-office staff at Toronto FC who finished 2nd in the CCL   *2018*
IBM CONSULTING COMPETITION - 1ST | Placed 1st out of over 95 teams at the event with over 500 participants   *2018*
PRINCIPAL'S AWARD | Recognition for delivering school wide talk to 200+ students about analytics in sports   *2016*

EDUCATION

UNIVERSITY OF WATERLOO | Candidate for Bachelor of Computer Science   *2016 – 2021*
WILFRID LAURIER UNIVERSITY | Candidate for Bachelor of Business Administration   *2016 – 2021*