Pravesh S. Jamgade

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Skills

C++, Python, C#, Java, Django, ROS, Android development, CAD/CAM development, Git, Algorithm design, Data Structure, Computer Architecture

Experience

- **IIT Ropar - Research Fellow** (Sept 2021 – present)

  Working on SERB India funded project in the domain of Computer Architecture.

- **Mowito - Robotics Software Engineer** (May 2020 – June 2020)

  Worked on AWS Robomaker for fleet simulation, developed metrics, testing navigation stack using ROS and Gazebo Simulator.

- **Techture Structures - SDE** (June 2018 – Oct 2019)

  - **Place & Route**

    Worked as a contractor with Katerra in the R&D program.

    Responsibilities :

    1. Designed software for extracting 3D geometries, placement of wires based on placeroute engine, automating workflows between cross-disciplinary BIM designs for CAD/CAM application.
    2. Led the development team, Coordination with globally working teams, worked in fast-paced and agile environment.
    3. Achived 70% efficiency in BIM design process, passed through UAT.

  - **planBIM - BIM collaboration platform**

    1. Development and testing of backend.
    2. Query optimization.

  - **IFC2CityGML**

    1. Design software for the storage and exchange of virtual 3D city models.
    2. Coverting IFC model to OFF data then to CityGML data.

- **Makxenia Engineering Resources - Developer Intern** (Nov 2017 - Jan 2018)

  Developed e-commerce android application. user-interface, shopping catalog, authentication, shared preferences, payment gateway integration.

- **Opensource** (2017 – present)

  Work in opensource projects: FOSSASIA, XBIM, Opengenus.

- **Prajwalan Cup, GCOEA - Convener** (Jan 2017 – Jan 2018)

  Prajwalan is the technical festival @ GCOEA. The team's responsibility is to organize contest for participating colleges and to decide winner of the technical festival.

Projects

- **rrt-console** [link]

  Implementation of rapidly exploring random trees for path planning. Visualization of explored paths using pygame.

- **IfcOperations** [link]

  Plugin for Autodesk Revit. Extract building geometry from IFC design. Supports for both Ifc2x3 and Ifc4 schema.

- **Android Bazzar** [link]

  An ecommerce android application.

- **Smart CCTv Surveillance**

  Used Raspberry-pi, OpenCv, Zapier, android app. Goal is to compress video feed using OpenCv, video compression algorithms to store, give real time notification of attempt of theft to user using Zapier services.

- **C++ Header Libraries**

  1. sortlib - templated sorting algorithms implementation. [link]
  2. logger - Logging library, allows enabling-disabling of comments, using variadic templates for multiple argument comments [link]
  3. path-finding - Collection of path finding algorithms like - DFS, BFS, A star, Dijsktra, Bellman ford using grid and non-grid graphs. [link]

- **Dumb Monster** [link]

  Pygame based simple game.

- **Quantum Encryption In Quantum Computing** [link]

  1. Review paper on encryption in quantum computing.
  2. Aim of the paper is to understand the encryption methodology BB84 in quantum computers that uses polarized photons as qubits.
  3. The paper discusses classical cryptography, history and fundamental of quantum encryption, explanation of BB84 methodology, applications and state of current Quantum encryption technologies
  4. The paper ends with conclusion how the Quantum Encryption can revolutionize secure communications, it's advantages and disadvantages

Education

- **Government College Of Engineering** Amravati,MH
  B.Tech in Computer Science and Engineering *Aug. 2014 – Aug. 2018*

PROFILE LINKS

Github   LinkedIn   Competitive Programming   Quora