Michael Macarevich

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Employment Experience

Independence Blue Cross

Senior Business Systems Analyst   (June 2022 - present)

Business Systems Analyst   (October 2018 - May 2022)

- Drove taking in-house control of backend work for health plan configuration database, previously done entirely by a third-party vendor, by doing the following:
    - Maintain a UML data model to define the entire structure of any particular Plan.
    - Translate plans' database information into member-facing output documents with BIRT.
    - Heavily clean up inherited code. Self-taught OCL to increase its use within the model, allowing smoother control. Rewrote BIRT JavaScript ground-up to follow better modular coding/OOP paradigms, eliminating ~5,000 lines of redudant code (about 37%) and resolving ~12,000 bugs/code smells as reported by NexusIQ.
- Deploy model and templates to Dev and QA environments. Recompile war files with model changes in a jar file; version templates in Git; deploy with Jenkins.
- Developed various Python scripts to automate Excel-to-JSON conversions, with data transformation and sanitizing, for downstream processing.
- Wrote SQL to query the database to assist Sales and Product teams.

Data Entry Specialist, A2C Consulting   (January 2018 - October 2018)

- Contractor at Independence Blue Cross - transferred thousands of healthcare plans from an older, highly freeform database (plus Excel sheets) to a new, more normalized database.
- Personally realized the potential of VBA macros to:
    - Rearrange/filter each plan's Excel sheet to match the database's benefits order.
    - Autopopulate sheets that reproduced database's claim-line calculator for validation.

Senior Capstone Project, sponsored by Boeing   (Fall 2015)

- Developed Python code with OpenCV to analyse the shape of caulk beads.
- Obtained average cross-section shape and pointwise straight-path deviation of beads from center using a camera tracking the deformation shape of a laser moving down the bead, scaling results with a trigonometric pixel-to-inch conversion.

Education

Rensselaer Polytechnic Institute (Troy, NY) - B.S. Computer & Systems Engineering, May 2016

Technical Skills

- MATLAB and Simulink for control systems and signal processing
- Coding in C family (C, C++, C# specifically), Haskell, Java, Javascript, Python, VBA
- In-depth analysis of systems layout, maintenance, and version control
- Relational database theory, implementation and querying; SQL and OCL
- Embedded circuit design using microcontrollers (hardware and software)