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| Michael **Duncan** | | |
| Binghamton, NY | duncanmk@acad.sunybroome.edu | (570)–396–8620 |
| |  |  | | --- | --- | | github.com/mkduncan | linkedin.com/in/duncanmk | | | |

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| **Experience** | |
| **CognitiveTPG – QA Engineering Technician** | 06/18 – 10/20 |
| Develops software that facilitates automating and streamlining software and hardware testing | |
| Contributes bug fixes, improvements, and changes to production-level and consumer-grade software | |
| Creates software programs that directly control and interface with point-of-sale and retail devices | |
| Provides technical support for internal IT-related issues and helps resolve general customer issues | |
| Designs and implements comprehensive test processes with thorough coverage and data collection | |
| Arbitrates discussions in establishing solutions between engineering, QA, and other departments | |

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| **Education** | |
| **SUNY Broome Community College** | Binghamton, NY |
| A.S. Computer Science | 08/15 – 05/18 |
| GPA: 3.86 | Honors Graduate |
| Dean’s List and President’s List | All Semesters |
| Phi Theta Kappa Honor Society | Volunteer Tutor |

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| **Expertise** | |
| **Languages** | **Technologies** |
| Proficient – C, C++, C# .NET, Java | Proficient – Unix, Windows, Visual Studio, .NET |
| Adept – Python, JavaScript, HTML, CSS | Adept – SVN, Regex, MySQL, Office, OpenGL |
| Familiar – SQL, PowerShell, PHP, VB, x86 ASM | Familiar – Git, Eclipse, Apache, VMWare, Qt |

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| **Personal Development** | |
| **Procedural Terrain Generator** | C, C++, OpenGL |
| Generates a terrain mesh surface using simplex noise and a triangulation algorithm with height-maps | |
| Implements an efficient rendering schema that utilizes spatial partitioning for endless terrain creation | |
| Utilizes linear algebra to create a 3D first-person camera that collides with terrain mesh surface | |
| **Reversi Game with AI Solver** | C, SDL, OpenGL |
| Operates a challenging AI opponent that plays Reversi competitively against a human player | |
| Selects game moves based upon results from a recursive look-ahead alpha-beta pruning algorithm   |  |  | | --- | --- | | **Handwritten Digit Recognition** | Java, Swing | | |
| Trains a statistical machine learning model using preprocessed images containing handwritten digits | |
| Establishes predictions on values of new handwritten digits using the perceptron learning algorithm | |
| **Personal Website** | HTML, JavaScript |
| Displays my personal portfolio on the following website: **mkduncan.github.io** | |