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| **ISAAC STYLES**  Isaacstyles92@gmail.com  (828) 284-1303  Visit w*ww.istyn.com* for code, projects, and papers. | **Technical Experience** | |
| **General Purpose Languages** | **Web Technologies** |
| C#, C++, Python, Java  order of preference | ASP.NET, Bootstrap, Laravel, PHP |
| WORK EXPERIENCE  Parts Specialist: O'Reilly Auto Parts  August 2014 – January 2015  Inventory Control: Styles Automotive Supply Inc.  Ongoing | **Data Science** | **Low Level** |
| Calculus-based statistics, SciPy | x86 Assembly, ARM on RaspberryPi |

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| **Information Systems** | | **IT for Small Business** |
| * Self-hosts ASP.NET 4.5 on Windows Server 2008R2 * SQL Server 2008R2 and Management Studio * Established redundant default gateways using Windows Routing and Remote Access Server * Automated Web Deploy for Microsoft IIS 7.5 * Virtualized DNS Server on Win2008R2 | | Freelance IT for two small businesses in Burnsville, NC. Performed networking, diagnostics, and scripting tasks   * SQL in small business setting * Script to import Excel file into database * Managed Cisco routers with CCNA * SAP ERP modules and techniques * Built desktops, laptops, and servers |
| LANGUAGES & TECHNOLOGIES   * HTML5 and CSS * XML and JSON * AJAX and LINQ | PROTOCOLS   * HTTPS * FTP over SSL * RSS Feed |

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| EDUCATION | | EXPERIENCE SUMMARY   * ASP.NET 4.5 with C# * In-house, server-side web hosting * PHP with Laravel Framework * Low-level implementation within high-level languages * Diagramming with Visio and Fritzing * Circuit design and implementation * Multi-threading and parallelization * Calculus-Based Statistics elective * Basic numerical techniques * Event-driven simulation * General Chemistry I & II * Organic Chemistry I * University Honors College 2010-2011 * 2nd place in 2009 North Carolina FBLA C++ programming competition |
| **B.S., Computing: Computer Science**,  East Tennessee State University, Johnson City  Graduated December 2016  **In-Major GPA: 3.00** | |
| **Research Data Science Team**  **Software Engineering II - Fall 2016** | |
| **Product Owner in agile development methodology:** | |
| Spearheaded a six-person team to collect and map community resources for ETSU Social Work Department. Selected and directed a team in conjunction with Dr. Brian Bennett to collect data, describe metrics, and investigate applications of machine learning. Produced heat map and related results to US Census Bureau population density. | |
| * JavaScript heat map * Python backend * Image processing * Geocoding | * SQLite * Attended ETSU CaRDS (Computation and Research in Data Science) lectures |

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| **Community Resource Data Collection** | **Vehicular Fuel Curve Recorder** |
| Gathered requirements from representatives of ETSU Social Work Department for website to collect and organize information about local community resources. Search, sort, and print information about food pantries, shelters, and other resources   * Agile development with SCRUM methodology * Database designed in MySQL * PHP with Laravel Framework * LDAP authentication to ETSU servers * Class and Architecture diagrams with Visio | Prototyped fuel curve recording tool from oxygen sensor, Arduino, RaspberryPi, and external ADC for deployment in running vehicle   * Arduino conditions and reports sensor data * Python frontend charts data * Serial communication with I2C and UART * Interrupt-driven design * Implemented logic level shifter circuitry * Circuitry diagram with Fritzing |
| **Computational Techniques** | **Volunteerism** |
| Molecular Dynamics   * Event-driven classical mechanics * Collision prediction fills a priority queue * Crystalline structure of binary ionic compounds * Empirical formula solver for binary ionic compounds | |  | | --- | |  |   **Volunteer (20 hours/2 weeks), Networking Diagnostics, Performance, 2016**  **Appalachian Truss, Burnsville, NC**  **Contact: Brian Jones, Owner**  **Volunteer (20 hours/week), IT Support, Image Manipulation Training, 2010**  **Premier Mountain Realty, Burnsville, NC**  **Contact: Teresa Bryant, Owner** |
| Numerical ANALYSIS   * Definite integral with Simpson’s rule   (C++, OpenMP, optimized)   * Strassen matrix multiplication   (C# and x86 assembly) |
| Parallelization   * POSIX threads (C++) * OpenMP API (C++) * SIMD vectorization using ARM Neon |  |

REFERENCES

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| Brian Bennett, PhD, IS  Associate Professor  bennetbt@etsu.edu  (423) 439-5717  Classes taught:  Software Engineering  I & II | Gene Bailey, PhD, CS  Associate Professor  baileyg@etsu.edu  (423) 439-3959  Class taught:  Assembly Language | Don Bailes, PhD, CS  Associate Professor  bailes@etsu.edu  (423) 439-6958  Classes taught:  Intro to Computer Science II,  Data Structures,  ASP.NET | Martin Barrett, PhD, CS  Assistant Chair  barrettm@etsu.edu  (423) 439-7409  Class taught:  Operating Systems |