**Collin Smith**

[smith.collin@husky.neu.edu](mailto:smith.collin@husky.neu.edu) • 425-736-5063

**Education**

|  |  |  |
| --- | --- | --- |
| Master of Science, Computer Science | *Northeastern University* Seattle, WA | **2017-present** |
| ALIGN Program | *Northeastern University* Seattle, WA | **2016-2017** |
| Ranger Leadership School | *US Army Schools*  Ft. Benning GA | **2009** |
| Airborne School | *US Army Schools*  Ft. Benning GA | **2007** |
| Bachelor of Science in Agribusiness | *Washington State University,* Pullman, WA | **1996-2000** |
| AAS Botany/Tree Fruit Production, | *Wenatchee Valley College* Wenatchee, WA | **1994-1996** |

**Technical Expertise**

**Languages**: C, C++, Python, Javascript, HTML, CSS, Java

**Tools/Libraries**: Ulfius, Jansson, Flask, SQLAlchemy, Gson, Git Version Control, Sklearn, Tensorflow, Keras

**Systems**: Windows, Ubuntu 16.04, Arduino, PintOS, Debian

**Technical Experience**

|  |  |  |
| --- | --- | --- |
| [Machine learning Classification and Regression,](https://github.com/Attonasi/mach_learning_midproj) | Seattle, Wa | **November 2018** |

* Use Sklearn tools L1and L2 normalization,1 hot encoding, and imputation to prepare 3 datasets
* Used support vector machines, gradient boosting classification to predict the age of abalone.
* Used Naïve-Bayes classifiers and gradient boosted classifiers to predict whether it would rain in Australia

|  |  |  |
| --- | --- | --- |
| [OS Threading, Lock, and Priority Donation Simulation](https://github.com/Attonasi/threading_sim) | Seattle, WA | **November 2018** |

* Used C to Simulate the locking, priority access and sleep functions of threads in an operating system.
* Currently using C to implement virtual memory in the Pintos operating system and extend the filesystem.

[Autonomous Vehicle Control System](https://github.com/Attonasi/avcs) Seattle, WA **August 2018**

* Used C++ and the ESP8266 SB Computer with Arduino framework to create autonomous vehicles
* Simulated a city with a large floor map and used a Wifi network to communicate with the ESP8266

controlling each vehicle connected to the network

* Used UDP communication protocol to control multiple vehicles and direct them to addresses on the map

|  |  |  |
| --- | --- | --- |
| [Book API](https://bitbucket.org/msdteam2/msd-book-api/src/master/), [Book Web Service](https://bitbucket.org/msdteam2/msd-library-client/src/master/) | Seattle, WA | **August 2018** |

* Built a REST API for a book service using Flask for the endpoints and an SQLAlchemy database
* Using Javascript/HTML/CSS built a front end for a book service using another team’s API
* Supported a team who used Angular to build a front end for our book service API.

|  |  |  |
| --- | --- | --- |
| [Tic Tac Toe,](https://github.com/Attonasi/tic_tac_toe) | **Seattle, WA** | **May 2017** |

* Used Ulfius library in C to create a REST server and Jansson library to facilitate JSON protocol
* The server operated statelessly and never lost.
* Built the client in Java using HTTP and Gson libraries to send REST requests to the server.

**Work and Leadership Experience**

|  |  |  |
| --- | --- | --- |
| **Founder, CEO** | ***Blewett Pass Farms***Peshastin*, WA* | **2013-2016** |

* Managed 15 full time employees and additional 15 seasonal workers.
* Designed and implemented the entire growing system from cloning to harvest and cure.

|  |  |  |
| --- | --- | --- |
| **Designer and Builder of Improved Assault Ladder** | ***Inventor***Spanaway*, WA* | **2011** |

* Extendable, bridges 12’ gap, solid wide steps for extended observations
* 4 patent claims

|  |  |  |
| --- | --- | --- |
| **NCO Team Leader,** | ***Washington National Guard***Seattle*, WA* | **2011-2013** |

* Served in 2012 Unit Training in Yakima, WA
* Fitness Excellence award 2013

|  |  |  |
| --- | --- | --- |
| **NCO Team Leader, RSTA Operator** | ***US Army 2nd Battalion 75th Ranger Reg***Ft. Lewis*, WA* | **2007-2011** |

* Four Deployments – Iraq (1 deployment), Afghanistan (3 deployments) Over 200 direct action combat missions
* TS/SCI clearance
* Team Leader and Special unit attachment on 3rd and 4th Deployments, Signed for over 2 million dollars of sensitive equipment