Andrew Gamble

andrewgamble.ca | andrew.gamble@uwaterloo.com | 778.228.3230

EDUCATION

UNIVERSITY OF WATERLOO
BCS in Computer Science
May 2022 | Waterloo, ON
Digital Hardware Option
Cum. Avg: 85%

SIMON FRASER UNIVERSITY
Conccurent Studies
Sept 2016 - May 2017 | Surrey, BC
Computer Science and Chemistry
GPA: 4.13

LINKS

Facebook:// andrewgamblee
Github:// gamblea
LinkedIn:// gamblea
YouTube:// andrewgamble
Instagram:// andrew_gamble

COURSEWORK

UNDERGRADUATE
Algorithms and Data Structures
Operating Systems
Digital Hardware and Logic
Object Oriented Programming
Computer Vision
Functional Programming
Unix Tools and Scripting

SKILLS

PROGRAMMING
25000+ lines of:
C++ • Javascript • Python
10000+ lines:
C • Java • LaTeX
1000+ lines:
GoLang • VHDL • C#
Racket • Matlab • Tcl

TECHNOLOGIES
Databases:
MongoDB • SQL • Redis
Tools:
Git • ViM • Quartus Prime

HOBBIES
Indoor and Beach Volleyball
Cooking for friends and family
Skiing and Snowboarding
Hiking and playing pool
Photography and making videos

EXPERIENCE

WISH | Software Engineering Intern
Jan 2020 - April 2020 | San Francisco, CA
- Worked on logistics system that tracks shipments from over 1 million merchants to 500 million users worldwide
- Implemented a daily monitoring flow for warehouse inventories using Airflow, Treasure Data, SQL, RedShift and Tableau
- Monitoring flow discovered important bottlenecks in warehouse inventory
- Built micro-service with Go, Redis, gRPC and Kubernetes that provides product blacklisting from store pickup program
- Expanded merchant facing API using Python, React, and MongoDB

INTEL | Software Engineering Intern
May 2019 - Sept 2019 | Toronto, ON
- Member of Quartus Prime Static Timing Analysis Team
- Developed within a modern C++ code base using boost libraries and Intel TBB
- Test Driven Development with Perl, Tcl, and Verilog hardware designs
- Redesigned and implemented the analysis of Strongly Connected Components within a timing graph and obtained a speed increase of 10x
- Debugged core C++ timing analysis algorithms using GDB, VTune and custom tools

RICH MEDIA | Web + Mobile Developer
Sept 2018 – Dec 2018 | Toronto, ON
- Built web applications for Samsung Canada, TD Insurance and Sun life Financial
- Led development of a cross platform voice application (Alexa and Google Home)
- Managed AWS Lambada, API Gateway and S3 resources to host applications

RESEARCH

ORI | Undergraduate Research Assistant
Sept 2019 – Dec 2019 | Waterloo, ON
Working on the development of Ori, a distributed file system built for offline operation and empowers the user with control over synchronization operations and conflict resolution

PROJECTS

PERSONAL WEBSITE | 2020
Automatic build system uses GraphQL to generate blog posts from Markdown and images. Pages are statically generated to increase render speed and SEO. Hosted on AWS using S3 and CloudFront

WLP4 COMPILER | 2019
Built a WLP4 compiler, a C like language, to create MIPS assembly using C++. Fully implemented the lexical analyzer, parser, and code generator

AWARDS

2017	1st/300	Volleyball Canada National Championships U17
2017	1st/50	Volleyball BC Provincial Championships U18
2017	SFU	Gordon M. Shrum Major Entrance Scholarship