Michael D. Johnston

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**Performance driven and methodical critical thinker
determined to ensure team success.**

The experience of 15 years as an athlete, 11 years of military service, and the completion of a Computer Science degree (May 2022) have imparted a practiced ability to read situational and human terrain allowing the generation of unique, empathetic, and efficient solutions to a variety of issues. I am looking to dedicate myself to the appropriate goal-oriented team in which members work through challenging tasks while elevating the performance of the whole as well as the individuals.

EDUCATION

University of Colorado Colorado Springs   **2018 – Present**
Bachelor of Innovation Degree, Computer Science (May 2022)

Innovation Core

**Innovation Team: Design and Lead, INOV 4010
Spring 2022/In progress**

Continuation of the teams' course sequence with emphasis on design and leading team projects.

Client: Global Gravity Association

The Global Gravity Association (GGA) is a rebranding of the International Downhill Federation, a sanctioning body within the gravity-based sports world. The GGA sought out a consulting team to build a new website that would allow for the strengthening of their community with dedicated member areas, provide resources to athletes and event coordinators, and allow for the selling of various types of merchandise. The website was to be built with React, include a user management system, incorporate merchant services, and integrate a live tracking system for sporting events.

**Entrepreneurship and Strategy, ENTP 4500
Fall 2020**

Capstone course for the Bachelor of Innovation. Basic knowledge of finance and accounting, marketing, operations, and management is assumed. Topics include understanding the entrepreneurial process, assessing opportunities, selecting a start-up team, financing entrepreneurial ventures, writing and presenting business plans, and new venture and competitive strategy. Utilizes lectures and case studies as well as coaching teams in the creation of a business plan and public presentation for an innovative new business or nonprofit organization.

Innovation Team: Research and Execute, INOV 3010
Fall 2019

Continuation of the teams' course sequence with advanced participation in team projects including research, design, and execution.

Client: Pueblo Department of Public Health and Environment (PDPHE), Pueblo County, CO
Derek Coe

coed@pueblocounty.us

The Pueblo Department of Public Health and Environment planned to launch the Youth and Behavioral Health Campaign, an initiative to bring awareness to adults concerning the impact their actions have on youth and the influence on growth as people and Pueblo citizens. The Innovation Team analyzed community member surveys, county demographics and population densities, consulted with city officials and committees, and researched proven strategies for congruent campaigns in order to generate a personalized campaign strategy. The final campaign package included original content for social media, print media, billboards, community engagement strategies, along with future survey outlines and material for planning and administering focus groups for campaign feedback and evolution.

Business and Intellectual Property Law, BLAW 2010
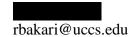**Fall 2019**

Examines the legal significance of ideas, innovations, and start-up organizations. A focus on the issues of intellectual property including patents, copyrights, and brand protection. Coverage of essential contracts and agents.

Semester project: Business Law Team created a unique invention and built a complete patent submission packet for approval by the United States Patent and Trademark Office.

Innovation Team: Analyze and Report, INOV 2010
Spring 2019

Teams course emphasizing team projects, research, analyzing data, and reporting.

Client: Talking Trees, Inc.
Rosena Bakari, PhD

rbakari@uccs.edu

Talking Trees, Inc., has a mission of supporting, and advocating for, adult survivors of childhood sexual assault. The Innovation Team re-energized communication strategies and tools for engagement with current and future members and advocates. Two websites were redesigned and rebuilt, informational brochure created for public distribution, hosted and assisted with in person events, and designed and executed social media campaigns influencing a 700% increase of incoming social media traffic and engagement.

Technical Writing, Proposals, and Presentations, INOV 2100
Fall 2018

Addresses five major types of technical writing: project reports, funding proposals, magazine and trade articles, technical reports, and journal articles. Includes peer review and critical assessments of others' writings.

Client: Warrior Family Legacy Foundation
Dorothy Bonvillain, PhD

dorothybonvillain@gmail.com

The mission of the Warrior Family Legacy Foundation is assisting military spouses gain foundational skills and mentorship as to facilitate financial independence. The Innovation Team generated a grant proposal package with the purpose of building an operational fund of $20,000,000.00 for the Warrior Family Legacy Foundation.

The Innovation Process, INOV 1010
Spring 2018

Overviews the key components in the innovation process and examples of major innovations throughout history. Examines the interdisciplinary nature of innovation. Includes group exercises focused on improving team dynamics, brainstorming, conceptual-block busting and other creativity and problem-solving activities.

Introduction to Entrepreneurship, ENP 105
Fall 2017, Pikes Peak Community College

Evaluate the business skills and commitment necessary to successfully operate and entrepreneurial venture and review the challenges and rewards of entrepreneurship. Understand the role of entrepreneurial business in the United States and the impact on our national and global economy. Navigate the process, completion, and execution of a business plan.

Innovation Cross-Discipline Core - Globalization

Introduction to Cultural Anthropology, ANTH 1040

Spring 2021

Introduction to the major aspects of culture, such as social organization, law, religion, and language.

Introduction to Global Politics, PSC 1010
Spring 2020

Introductory analysis of the contemporary international system and major state and non-state actors in world politics. Considerable attention is given to internal political features and to the problems/perceptions of the various actors that shape their external behavior.

Semester Paper: analysis on the instrumental value associated with holding a temporary non-permanent member seat on the United Nations Security Council.

Beginning Spanish, SPAN 1010
Fall 2018

Essentials of Spanish, oral-aural skills stressed with additional reading, writing, and grammar.

Intro to Human Geography, GES 1990
Spring 2018

A systematic introduction to the broad field of human-land interactions and spatial order. Emphasis is placed on the major themes of geographic inquiry including use of thematic maps, population numbers and distribution, development, changing resource and land use, culture regions, location decisions, settlements and cities, transportation, political units, and human-environment interactions.

Computer Science

Design and Analysis of Algorithms, CS 4720
Spring 2022/In progress

Design methodologies: divide-and-conquer, exhaustive search, dynamic programming. Time and space complexity measures, analysis of algorithms. Survey of important algorithms for searching, sorting, graph manipulation. Tractability: class P and NP, NP complete problems.

Software Project Management, CS 4350
Spring 2022/In progress

Planning, scheduling, costing of projects. Measuring progress, predicting success, controlling failure. Management tools and their use. Effectiveness and efficiency of software engineering environments. Distributed software development. Quality control standards and practices.

Operating Systems I, CS 4500
Fall 2021

Introduces concepts, terminology, and algorithms of operating systems. Describes semaphores, processes, virtual mappings, interrupts, resource allocation and management, protection, synchronization, scheduling, queuing, and communication as applied to operating system design and implementation.

Database Systems I, CS 4420
Fall 2021

Course introduces general database concepts as well as database system technology. The course covers ER and R data models, R-algebra, SQL, data storage and indexing, query optimization, database design and security.

Semester project: Interactive map through the use of the service Mapbox. Completed map uses data loaded into Mapbox and information relayed via website that allows the user to select a UFO sighting location, from a world map, and receive details or video relating to the selected UFO sighting. Map may be found at johnston-m.com/portfolio-item-ufo.html or johnston-m.com/ufoSite.html

Software Engineering, CS 3300
Fall 2021

Students build a solid foundation for developing and maintaining sustainable codebases through modern practices. Version control, project management styles, coding best practices, cloud services, and web technologies used to create deployable products and maintain work.

Semester project: Web-based application serving as a student portfolio. The portfolio was constructed as a Software as a Service (SaaS) with Ruby on Rails, utilized version control, implemented Test Driven Development (TDD), Continuous Integration/Continuous Deployment (CI/CD), user management, and cloud-based deployment. Portfolio may be found at johnston-m.com/portfolio-item-herokuportfolio.html or glacial-tor-23217.herokuapp.com/

Concepts of Programming Languages, CS 3160
Fall 2021

Evolution of the central concepts of programming languages, describing syntax and semantics, data types, abstract data types, control structures, subprograms, concurrency and exception handling.

Computer Networks, CS 4220
Spring 2021

Course focuses on the basic network and protocol concepts and principles with practical hands-on exercises on network management, network programming, and network planning through the use of industry simulators. Topics include internet protocols and routing, local area networks, basic TCP/IP programming, congestion control, packet switching and routing, quality-of-service, and network management.

System Admin and Security, CS 3910
Spring 2021

Covers the installation and configuration of mainstream operating systems, important network services, disaster recovery procedures, and techniques for ensuring the security of the system.

Object Oriented Programming with C++, CS 3060
Spring 2021

The primary areas of focus of the course include learning the fundamentals of object-oriented programming, gaining skill and proficiency in using the C++ programming language, and to exercise the C++ language in implementing a moderate sized software system designed with objects.

Computer Architecture I, CS 4200
Fall 2020

Fundamentals of computer design, instruction set principles and examples, pipelining, advanced pipelining and instruction-level parallelism, memory-hierarchy design and survey of design issues in storage, interconnection network and multiprocessor systems.

User Experience and User Interface Design, CS 3400
Fall 2020

Introduction to user experience and user interface design. Topics include user needs analysis, usability concepts, design principles, interaction design, prototyping, usability testing, basic web technologies, and visual design principles. The emphasis is to gain practical experience in transforming user needs and product goals into a highly usable screen-based experience.

Social and Ethical Implications of Computing, CS 3050
Fall 2020

Discuss selected topics in ethical, social, political, legal and economic aspects of the application of computers.

Programming with UNIX, CS 2080
Fall 2020

An introduction to the UNIX operating system with an emphasis on the development of C and command shell programs

Computer Organization and Assembly Language Programming, CS 2160
Spring 2020

Provides an introduction to the concepts of computer architecture, functional logic, design and computer arithmetic. It presents material on the mechanics of information transfer and control within a computer system. Also included: symbolic programming techniques, implementing high level control structures, addressing modes and their relation to arrays, subprograms, parameters, linkage to high level languages and the assembly process.

Data Structures and Algorithms, CS 1450
Fall 2019

Concepts of data type, data abstraction, and data structure. Internal representations of fundamental data types. Linear data structures: stack, queue. Linked data structures and dynamic data types. Search table data abstraction, linear search in arrays and lists, binary search in arrays and trees. Binary trees, non-binary trees, binary search trees.

Principles of Computer Science, CS 1150
Fall 2018

Introduction to programming with emphasis on computer science concepts. Develops methods for computer problem solving. Develops proficiency for programming in a modern programming language and introduces the concepts of abstraction in problem solving. Includes basic concepts of computer systems and environments including debuggers, editors, and file systems.

Programming with C, CS 2060
Fall 2018

A first course in the C programming language for those who are proficient in some other high-level language.

Computational Thinking with Beginning Programming, CS 1120
Spring 2018

Explores the ideas behind computational thinking: the thought processes involved in analyzing problems and formulating their solutions in precise, unambiguous ways. Topics include data collection, analysis, and representation; algorithms and procedures; simulation; and others. Most problem solutions in the course are implemented as computer programs.

Introduction to Programming, CSC 119
Fall 2017, Pikes Peak Community College

Focuses on a general introduction to computer programming. Emphasizes the design and implementation of structured and logically correct programs with good documentation. Focuses on basic programming concepts, including numbering systems, control structures, modularization, and data processing. A structured programming language is used to implement the student`s program designs.

EMPLOYMENT HISTORY

Arizona Army National Guard / United States Army   **2006 - 2017**

Warrior Transition Battalion, Fort Carson   **2014 - 2017**
   Squad Leader/Platoon Sergeant

First line supervisor for 20-36, present and out of state, regular Army, National Guard, Reserve, and Special Operations Soldiers in Transition of all ranks and grades. Guide, support and mentor all Soldiers throughout their medical treatment, rehabilitation, and transition back to military service or civilian life. Maintain accountability, complete all administrative processing and tasking, monitor and facilitate adaptive living condition requirements, coordinate palliative care and end of life services. Coordinate with military and civilian Physicians, Nurse Case Managers, Social Services, specialty providers, volunteer organizations, along with other government and civilian agencies to ensure Soldiers heal mentally and physically in order to facilitate their transition.

Arizona Pre-Mobilization Training Assistance Element (AZ PTAE)   **2012 - 2014**
   Combat Trainer

Member of an 8-man Mobilization Training Branch designated to train Active Duty, National Guard, and Reserve Component military units in all regional, military command specific, training guidance prior to CONUS and OCONUS deployment. Organize and provide administrative briefings, realistic field instruction, and combat simulation to prepare Soldiers of all ranks and grades for humanitarian, security, and combat operations worldwide.

Department of Emergency Management and Military Affairs (DEMA)   **2010 - 2012**
     Security Officer A

     Responsible for permitting authorized access to a Joint Forces Military Reservation, responding to emergent issues and immediate threats, providing security and access for classified meetings, analyzing security threats and modifying mitigation factors during changes in current local/global threats and Force Protection Levels, working with local law enforcement and US government agencies for multiple security operations.

HONORS AND AWARDS

President's List, University of Colorado Colorado Springs   2021
President's List, University of Colorado Colorado Springs   2020
President's List, University of Colorado Colorado Springs   2019
President's List, University of Colorado Colorado Springs   2018

REFERENCES

References available upon request.