DOMINIC BROWN

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RELEVANT EXPERIENCE

Software Engineer, Elsevier Inc., Raleigh, NC   May 2018 – Present

- Utilizing Spring Security and Spring Session to implement cross-domain authentication, allowing users to seamlessly transition between applications without needing to re-login — includes researching session storage alternatives, collaborating with engineering leadership to upgrade Spring to a version compatible with Spring Sessions
- Implementing new authoring features on web-based care plan application — includes adding client-side UI using ExtJs, improving backend Spring code to support new use-cases, writing tests to support new and legacy code, and updating OracleSQL database to support code changes
- Using OracleSQL to ingest client catalog data into database for use in the authoring tool application — includes working with client services to determine requirements, researching legacy upload procedures, and solving issues with data ingestion
- Optimizing Hibernate mapping to improve application responsiveness and reduce database queries

President, HackPack Security Club, North Carolina State University   Jan 2021 – Dec 2021

- Creating cybersecurity learning resources to teach new members ethical hacking - includes creating step-by-step environment setup guides and hosting custom practice challenges for members to learn hacking fundamentals
- Developing a reverse engineering challenge for HackPackCTF, an annual Capture the Flag competition hosted by the club and NCSU faculty
- Leading, recruiting, and retaining club members - includes setting and tracking long-term goals and outcomes, facilitating workshops from security professionals in industry and academia, planning weekly meetings and practice challenges, and participating in monthly Capture the Flag

Associate Support Engineer, Connecture Inc., Durham, NC   May 2017 – May 2018

- Gathering requirements for and implementing Elastic Stack (ELK) as a logging and aggregation solution for an AWS-hosted microservice product — includes deploying ELK to an EC2 instance, updating the individual services' Ansible playbooks to include Filebeat for log shipment, creating regex filters for critical errors, and setting up basic alerting.
- Creating a training course for the support team to practice using ELK effectively
- Working alongside the DevOps team to deploy, upgrade, and support multiple microservices

EDUCATION

North Carolina State University, B.S. degree in Computer Science, Cybersecurity Track 2021
- Researching Android web security under Dr. Kapravelos of the Wolfpack Security and Privacy Research (WSRP) Lab

Durham Technical Community College, A.S. degree, 2016
- Placed 3rd in school for AMATYC Student Mathematics League

SKILLS

Programming Languages: Java, JavaScript, Python, C#, SQL, C/C++
Java Frameworks: Spring, Spring Security, Spring Session
Database Systems: OracleSQL, Hibernate, MongoDB

References available upon request