MacB is searching for interns to contribute to network analysis research efforts involving the design, development, and testing of security and data analysis solutions. You would bring the desire to be part of an advanced research and development team at the forefront of building innovative information security technologies. This is a great place to demonstrate and grow your technical skills in an interdisciplinary environment with other smart people - and have lots of fun doing it.

This position will reside in the Roanoke, VA office of MacB’s Secure Computing and Communications Division. Interested applicants should contact: jeffrey.grant@macb.com

Requirements:

• Experience with C++, Java, or Python
• Capability to read and digest research literature, assess feasibility, implement proposed algorithms, and apply findings to new problems
• Works independently, demonstrates initiative and interacts with a variety of engineering development teams
• Progress towards a B.S. degree or higher in Computer Science, Computer Engineering, Electrical Engineering, Mathematics or related field
• U.S. citizenship is required

Desired:

• Working knowledge of TCP/IP and OSI network models
• Experience in cyber security and/or network science to help conduct experimentation supporting current research goals as well as develop new research areas
• Experience penetration testing for testing effectiveness of firewalls, IDS/IPS, DLP and anti-bot solutions
• Any knowledge of or interest in:
  • Statistical methods, information-theoretic approaches, game-theoretic approaches, plan recognition, and adversarial reasoning techniques
  • Network theory and analysis, data and information fusion and deception analysis
  • Bayesian methods, human cognitive models, and machine learning of threat behavior
  • Automated signature derivation, risk and vulnerability analysis, attack prediction, and alert correlation and prioritization
  • Data analysis, big data, data visualization