Ayman Ali

Contact - ayman.ali1230@gmail.com

Education

University of Connecticut, Storrs, CT   August 2012 - May 2016
Bachelor of Science, Mathematics

New England Scholar || 2015
Dean's List || Fall 2014 - Spring 2016

Coursework & Research Concentrations

- Probability
- Advanced Statistics
- Computational Physics
- Real and Complex Analysis
- Thermodynamics
- Stochastic Modeling
- Medical Decision Science
- Health Outcomes Research
- Stroke
- Neonatal Encephalopathy
- Esophageal and Thyroid Cancer
- Pulmonary Embolism

Languages

- Spoken: Fluency in English, Urdu, and Hindi. Conversational in Punjabi.
- Programming: Fluency in C++ and Python. Proficiency in C. Familiarity with R and SQL.

Publications

1. Kabrhel C, **Ali A**, Choi JG, Hur C. "Systemic Thrombolysis, Catheter-Directed Thrombolysis, and Anticoagulation for Intermediate-Risk Pulmonary Embolism: A Simulation Modeling Analysis". Academic Emergency Medicine. [In Press]

2. Lubitz C, **Ali A**, Zhan T, Heberle CR, White C, Gazelle GS, Kong CY, Hur C. "The Thyroid Cancer Policy Model: A Mathematical Simulation Model of Papillary Thyroid Carcinoma in The U.S. Population". PLOS One. 2017 May 8.

3. Heberle C, Omidvari A, **Ali A**, Kreop S, Inadomi JM, Rubenstein JH, Tramontano AC, Dowling DC, Hazelton WD, Luebeck EG, Lansdorp-Vogelaar I, Hur C. "Cost-Effectiveness of Screening Patients with Gastroesophageal Reflux Disease for Barrett's Esophagus With a Minimally Invasive Cell Sampling Device." Clinical Gastroenterology and Hepatology. 2017 Feb 23.

4. Kroep S, Heberle CR, Curtius K, Kong CY, Landsdorp-Vogelaar I, **Ali A**, et al. "Impact of Radiofrequency Ablation Treatment of Barrett's Esophagus on Esophageal Adenocarcinoma: A Comparative Modeling Analysis." Clinical Gastroenterology and Hepatology. 2017 Jan 12.

Work and Research Experience

Institute for Technology Assessment, Massachusetts General Hospital, Boston, MA   June 2016 - Present
Programmer Analyst and Researcher

- Creating and developing mathematical models (C/C++) of esophageal and thyroid cancer.
- Building medical decision models (C/C++/Python) of various diseases such as pulmonary embolism, stroke, eosinophilic esophagitis, and neonatal encephalopathy.

Cambridge Biomedical and Economic Consulting Group LLC, Boston, MA   August 2017 - Present
Analyst

- Lead project analyst for development of health-economic models.

Hazmat Response Team, Massachusetts General Hospital, Boston, MA   October 2016 - Present
Volunteer

- Emergency response volunteer, on call every third month.
- Participate and train in preparation for a variety of circumstances, such as extreme weather and specific chemical, biological, radiological, or nuclear threats.

Psychology Department, University of Connecticut, Storrs, CT   August 2015 - May 2016
Research Assistant

- Coding for experiments (simulations, virtual reality, and games) using Unity and C#.
- Supervising participants and running experiments.
- Aiding in experimental design.

Quantitative Learning Center, University of Connecticut, Storrs, CT   August 2014 - May 2016
Mathematics, Physics, and Statistics Tutor

- Tutoring students with a focus on developing, strengthening, and applying analytical skills to quantitative problems.
- Specific subjects include all introductory calculus, physics, and statistics classes, probability, differential equations, multivariable calculus, and linear algebra.

Prime Healthcare of Southport, Fairfield, CT   May 2014 - May 2016
Medical Receptionist
- Organizing and handling incoming patient information such as prescription refills, consultation reports, and bloodwork.
- Working with various insurance and pharmaceutical companies in order to get patients coverage for medically necessary procedures, treatments, and drugs (most commonly through prior authorizations).
- Scheduling patients and checking them in, in addition to submitting and following up on insurance claims.
- Wrote and completed clinical notes.

Posters & Presentations

1. **Ali A**, Eschenfeldt P, Zachrison K, Schwamm L, Hur C. "Modeling Pre-hospital Triage Decisions for Patients with Suspected Stroke Due to Severe Large Vessel Occlusion". [Speaker, The NorthEast Cerebrovascular Consortium, Newport RI, October 2017]. **Recipient of $10,000 funding award** as the winner of "Stroke Tank: Pitch It to the Judges!".

2. Choi JG, Nipp RD, Tramontano A, **Ali A**, Zhan T, Kong CY, Pandharipande P, Dowling E, Ferrone C, Hong TS, Schrag D, Castillo CF, Ryan DP, Hur C. "Neoadjuvant FOLFIRINOX for patients with borderline resectable or locally advanced pancreatic cancer: Results of a decision analysis". [Poster, American Society of Clinical Oncology, Chicago IL, June 2017].

3. Zhan T, **Ali A***, Choi JG, Kim D, Garber J, Hur C. "Optimal Food Elimination Strategy for Eosinophilic Esophagitis". [Poster, Digestive Disease Week, Chicago IL, May 2017]. *Co-First Author.

4. **Ali A**, Kabrhel C, Choi J, Hur C. "Catheter-Directed Thrombolysis for Intermediate-Risk Pulmonary Embolism: A Simulation Modeling Analysis. [Poster, Society of Academic Emergency Medicine Annual Meeting 2017, Orlando FL, May 2017].

5. Choi JG, **Ali A**, Hur C, Lubitz SA. "Population Screening for Atrial Fibrillation: Results of a Cost-Effectiveness Modeling Analysis". [Poster, Heart Rhythm 2017, Chicago IL, May 2017].

6. **Ali A**, Heberle C, Omidvari A, Kreop S, Inadomi JM, Rubenstein JH, Tramontano AC, Dowling DC, Hazelton WD, Luebeck EG, Lansdorp-Vogelaar I, Hur C. "Cost-Effectiveness of Screening Patients with Gastroesophageal Reflux Disease for Barrett's Esophagus With a Minimally Invasive Cell Sampling Device." [Poster, Hampton Symposium, The Massachusetts General Hospital Radiological Society / Harvard Medical School, March 2017].

7. Zhan T, **Ali A**, Heberle CR, White C, Gazelle GS, Kong CY, Hur C, Lubitz C. "The Thyroid Cancer Policy Model: A Mathematical Simulation Model of Papillary Thyroid Carcinoma in The U.S. Population". [Poster, Hampton Symposium, The Massachusetts General Hospital Radiological Society / Harvard Medical School, March 2017].

8. **Ali A**, Kabrhel C, Choi J, Hur C. "Catheter-Directed Thrombolysis for Intermediate-Risk Pulmonary Embolism: A Simulation Modeling Analysis". [Presentation, New England Research Director's Society for Academic Emergency Medicine, Worcester MA, March 2017].

Community & Service

Science Fair Mentor, Massachusetts General Hospital, Boston, MA   September 2016 - Present
Volunteer
- Worked with children from city public middle schools with their science fair projects, serving as a guide and tutor.
- Taught components of research in STEM with an underlying understanding that most students did not have access to computers.

Kids and UConn Bridging Education   August 2015 - May 2016
Volunteer
- Mentored children from low-income neighborhoods around the University of Connecticut with the goal to build literacy, social involvement, and aspiration.

Global Scholars Project   Spring 2013
Field Worker
- Traveled to isolated areas of Pakistan to provide impoverished children with means to a proper education.
- Enhanced and strengthened education programs by providing schools (founded on previous trips) with computers containing pre-installed information, in order to circumvent lack of internet and frequency of load shedding.
- In charge of documentation of the trip, including administering interviews with students and teachers in order to potentially improve the effectiveness and long-term sustainability of the programs.

Red Cross Society, University of Connecticut, Storrs, CT   September 2012 - September 2014
Awareness Chair
- Built and maintained a strong network of volunteers at the university from student organizations.
- Oversaw and supervised drives for a minimum of 20 hours a semester, serving as the primary contact for questions by volunteers, donors, or red cross officials.
- Created presentations and workshops to train and educate students interesting in volunteering at drives.