Georgia Institute of Technology®

Atlanta, Georgia

***GEORGIA INSTITUTE OF TECHNOLOGY
IS A UNIT OF THE
UNIVERSITY SYSTEM OF GEORGIA***

APPLICATION FOR GRADUATE ADMISSION

PERSONAL INFORMATION

Full Legal Name: BOKER   Michael   David
Last name (Family name)   *First name (Personal Name)*   *Middle Name*   *Suffix*

Preferred First Name: Michael

Will we possibly receive records for you under any other name? ❑YES ☒NO

If yes, what name? _____ _____ _____
First   *Middle*   *Last*

Gender: ☒Male ❑Female   Date of Birth: 03-25-1991 mm/dd/yyyy   Place of Birth: Warren, OH, United States of America

Permanent Address: Street   202 Pheasant Run
Family Home

City   Warren, OH   Country   United States of America

Mail Code 44484   Permanent Telephone 3305065690

E-mail Address: bbokerr6@gmail.com

Current Address: This address is valid until: 07-15-2017 mm/dd/yy
Present Location   Street   895 N 6th St

      Apt 302

City   Columbus, OH   Country   United States of America

Mail Code 43201   Current Telephone   3305065690

Degree Objective: Masters   Campus: Online   Admit Term: Fall 2017

Graduate Major: Master of Science in Computer Science - Online

Are you a: First-time graduate student

Have you previously applied for admission, been enrolled as a student, or been otherwise affiliated with Georgia Tech resulting in assignment of a gtID number? ❑YES ☒NO

gtID Number: _____

If your degree objective is Masters, do you plan to pursue a PhD degree in the future? ❑YES ☒NO

If Yes, when?_____ If 'Other' please explain: _____

Are you a current Georgia Tech graduate student? ☐ YES ☐NO

Are you seeking to CHANGE graduate degree programs or to ADD a secondary degree program?

☐YES ☐ NO

FUNDING

Do you wish to be considered for Financial Assistance?	❑YES ☒NO
Do you require Financial Assistance in order to Attend Georgia Tech?	❑YES ☒NO

ACADEMIC HISTORY

College Code	Name of Institution	City	Attend From	Attend To	Degree	Degree Date	Major	GPA
001592	Ohio State Univ Columbus	Columbus	09-2009	05-2014	BS	05-2014	Computer Science and	3.54

TEST SCORES *Please indicate the date you have taken OR will take the required test(s).*

TEST	DATE	V	%	Q	%	AW	%	TOTAL SCORE
GRE								
GRE SUBJECT		TOPIC:						
GMAT								
TOEFL								

RECOMMENDATIONS

The following individuals have agreed to provide recommendations on my behalf.

NAME	EMAIL ADDRESS	INSTITUTION
Krishnajith Krishnankunji	jithkris@yahoo.com	Nationwide Insurance
Perumal Ramasamy	ramasamy.12@osu.edu	The Ohio State University
Patty Weinrick	Patty_Weinrick@anfcorp.com	Abercrombie And Fitch

SELF-REPORTED BACKGROUND DISCLOSURE

Georgia Institute of Technology is committed to maintaining a safe environment for all members of our community. All applicants must answer these questions. An affirmative answer to any of these questions does not automatically bar admission to the institute, but does require review. You are required to provide an explanation for each instance you answer Yes. The statement will be used in the review process.

1. Have you ever been convicted of a crime other than a minor traffic violation?   ☒YES ☐NO

    If yes, please briefly explain here.

    > August, 2011: I pled guilty to misdemeanor open burning.
    > October, 2015: I was charged with driving under the influence of alcohol. The charge was reduced, and I pled guilty to physical control of a vehicle while under the influence. I have not consumed a drink in the 16 months since.

2. Are there any criminal charges currently pending against you?   ☐YES ☒NO

    If yes, please briefly explain here.

3. Have you entered a plea of guilty, a plea of no contest, a plea of   ☐YES ☒NO
    nolo contendere, an Alford plea to a criminal charge, a plea under
    a first offender act?

    If yes, please briefly explain here.

4. Do you currently have disciplinary or academic misconduct charges   ☐YES ☒NO
    pending against you from a high school, college or university?

    If yes, please briefly explain here.

5. Have you ever been disciplined, suspended, or expelled for conduct   ☒YES ☐NO
    code violations from a high school or post-secondary educational Institution?

    If yes, please briefly explain here.

    > In August of 2011, I was put on disciplinary probation after being charged with open burning. I was caught holding a lighter to a futon in my dumpster.
    > I claimed that the futon was made with flame retardant material, and my roommate did not believe me. I foolishly felt the need to prove it.

CITIZENSHIP AND ETHNICITY INFORMATION

☒ U.S. Citizen
❑ Non-US Citizen   Country of Citizenship (if not US):   _____

Do you hold citizenship in any other country?   ❑YES ☒NO
Other Country of Citizenship: _____

Are you currently in the U.S. or will travel to the U.S. with a visa prior to
your potential enrollment at Georgia Tech?   ❑YES ❑NO

If so, what is your current Visa type?   ❑F-1 ❑J-1 ❑Other

Sevis ID (if available):   _____

Will you require a student visa to study at Georgia Tech?   ❑YES ❑NO

If yes, ❑F-1 ❑J-1

Note: *Permanent Residents are classified as Non-Citizens until a Permanent Resident Card is provided.*

The information requested below will not be used for admission purposes. The data will be used to satisfy federal reporting requirements and other purposes allowed by law.

Are you Hispanic or Latino?   ❑YES ☒NO

Check all that categorize your race.

(Note: Regardless of your answer to the previous question, please mark one or more races to indicate what you consider yourself to be.)

☒   White
❑   American Indian or Alaskan Native
❑   Asian
❑   Native Hawaiian or Pacific Islander
❑   Black or African American

RESIDENCY   *(Required for US/PR only – International applicants please leave blank)*

US State of Legal Residence   OH_____

If GEORGIA, Country of Residence   _____

If you consider yourself a legal resident of the State   ❑YES ❑NO
of Georgia (US), do you expect to receive in-state tuition fee rates?

NOTE   If YES, you will be required to complete the Georgia Residency Application which is a part of this application. Once received, your credentials will be evaluated and a notation of your residency status will be entered in the applicant data- base and will appear on Status Checking.

All persons admitted to institutions of higher learning in the State of Georgia will be required to submit documentation proving that they are lawfully in the United States. If an applicant wishes to be considered for in-state tuition rates, he/she must also present

U.S. MILITARY INFORMATION

Are you currently active duty, a veteran, member of the National Guard or   ❑YES ☒NO
Reservist in the US Armed Forces?   If yes, please specify. _____

If Active Duty, which Branch? _____   Home of Record State? _____

Are you the spouse or dependent child under the age of 24 of someone who is currently active duty, a veteran, member of the National Guard or Reservist in the U.S. Armed Forces?   ❏YES ☒NO

NON-U.S. MILITARY/GOVERNMENT INFORMATION

Are you currently active duty, veteran, a member of the National Guard, or a Reservist in any Non-US Military armed force?   ❏YES ☒NO

Country: _____

Branch: _____

Are you currently employed or on leave from any Non-US Government Agency?   ❏YES ☒NO

Country: _____

Agency/branch: _____

ADDITIONAL INFORMATION

Are you currently enrolled in any other Educational Institutions?   ❏YES ☒NO

Country: _____

Name of Institution: _____

Are you currently employed or on leave of absence from employment?   ☒YES ❏NO

Country: _United States of America_____

Name of Company: _Sogeti USA_____

CERTIFICATION

I certify that the information provided in this application is true and complete. I understand that omission or misrepresentation herein may result in automatic rejection of my application to Georgia Tech. If admitted, I agree to abide by the Rules and Regulations of the Academic honor Code of the Georgia Institute of Technology.

Signature of Applicant _Michael David BOKER_____   Date _02-13-2017_____

Rev 11/2016

PART 4 GEORGIA TECH ONLINE MASTERS IN COMPUTER SCIENCE APPLICATION

Name: Michael BOKER

1. How did you learn about Georgia Tech's Online Master of Science in Computer Science program? Social media

2. List **other graduate programs** to which you have applied. (optional)

UNIVERSITY NAME

3. Briefly describe your eventual **career objective**. Your space is limited to 150 characters (e.g., University Professor, Industry Researcher, etc.).

    I want to become a machine learning engineer and work on artificially intelligent software systems

4. Please describe your **background** (academic and extracurricular) and experience, including research, teaching, industry, and other relevant information. Your space is limited to 2000 characters.

I received my B.S. in computer science and engineering from Ohio State in 2014, graduating cum laude.

While in school, I had two internships with Strategic Insurance Software, a Columbus-based company that produces insurance agency management software. I worked on C# packages for importing data from the schemas of our competitors, to be used in on-boarding new customers.

I had a final internship with JP Morgan Chase, where I wrote a Java utility for converting flat mainframe files to collections of Java Objects and vise versa. I also participated in a program after work hours in which I worked with a team to develop a cross-platform mobile application for a local non-profit organization.

After graduation, I began working for Nationwide Insurance. For almost two years, I did full stack development on customer facing web applications for selling property and auto insurance. In this role, I gained experience in Java web development, and greatly improved my front end development abilities. I also worked on a batch process for creating flat files from data for new customers. After taking an interest in graph databases and the Neo4j platform, I created a proof of concept for using a graph database to better predict the intentions of visitors to our application, and thus better tailor their experience.

I left Nationwide Insurance in Spring of 2016 to begin working as a consultant at Abercrombie & Fitch. In this role, I have built multiple web applications for internal use in inventory management, and I have gained experience with taking an application from nothing to production. I have been part of the design and planning phases of these projects, as well as the lead developer on my team.

Recently, in my spare time, I have completed the Coursera class on machine learning taught by Dr. Andrew Ng. I have also completed approximately two thirds of my Udacity machine learning nanodegree, which I will have finished by the summer.

Statement of Purpose

Data is everywhere, and our ability to collect and utilize data is increasing at a tremendous rate. Machine learning, while not a new science, has recently been enabled at never-before-seen scales thanks to advancements in technology. I believe that there is great potential for the use of machine learning across many industries, and I want to participate in the effort to harness this potential.

When I first learned about graph databases, I had an idea to create a model of the global economy using a graph. This model would take into account the values of every facet of the economy: currencies, commodities, stocks, loan shares, and so on. It would also monitor every conceivable factor that affects the economy, such as weather events, election results, and scientific discoveries. Quickly this idea began to seem unrealistic. Nonetheless, I started to think about what would be required to implement such a model, and my answer was a lot of data combined with a lot of people. The people could find trends in the data and create relationships in a graph. The idea still seemed farfetched, and struck me as something that would require hundreds of experts at an investment bank. Then I realized that the tasks of gathering and analyzing the data could be done algorithmically, and I began to think about machine learning.

Artificial intelligence was an interest of mine at the end of my undergraduate studies. I took a course on automata and the limits of computability in my penultimate semester. The study of state machines had me thinking about ways that software could mimic the human mind, and I found it very interesting. In my final semester, I took an introduction to artificial intelligence course, which contained assignments for implementing simple path traversal algorithms, including A* search. This course, though elementary in the realm of artificial intelligence, really sparked my interest in the domain. Combining the lessons about heuristics from this course with what I had learned in the automata course, I began thinking of ways a hyper-heuristic could be used to algorithmically improve the performance of a lower system. I was not familiar with the phrase "machine learning" at the time, but it is exactly what I was pondering.

With this newfound interest, I began looking into the pursuit of artificial intelligence work for a career. I was discouraged to find that it was difficult to find work in the field without a PhD. More school was not a practical option for me at the time. My interest in the field lay dormant in my mind for almost two years, until I began to think about it again in the context of my economic model idea. At this point, I decided to pursue some knowledge on my own, and began my Udacity nanodegree. To supplement the high level knowledge from the nanodegree, I completed the Coursera machine learning course. This course explained more of the mathematics and implementation behind the algorithms, demystifying some of the magic.

Shortly after beginning the nanodegree, I decided that I want to focus on this field for my career. I still had the obstacle of needing to maintain a source of income while pursuing further education, which is what led me to the OMSCS program. I am very excited by the fact that I can continue to work a full time job, while pursuing a master's degree from a school as prestigious as Georgia Tech. My hope is that earning my masters degree through the OMSCS program will give me the knowledge to thrive in the field of machine learning, as well as the degree to get my foot into the door. I will be finishing my nanodegree soon, and I am pre-enrolled to take the new nanodegree offering in deep learning. My goal is to get an entry level data scientist or machine learning position this summer. This, combined with the education I would receive through the OMSCS program, would allow me to learn at a very high rate and find my place in this exciting industry.